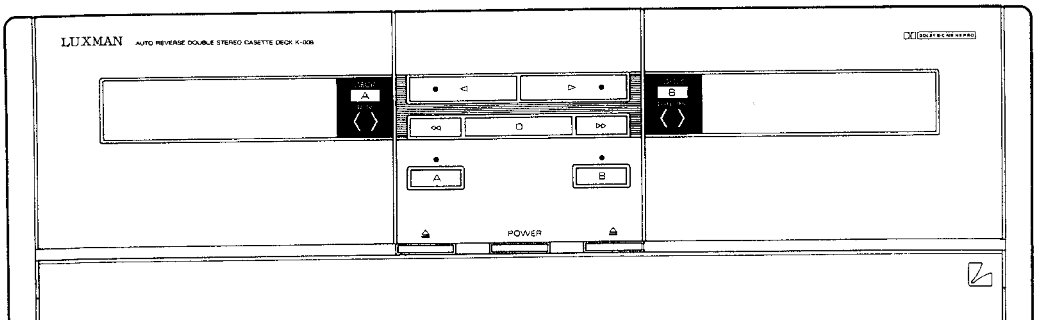
SERVICE MANUAL

Auto Reverse Double Cassette Deck

K-008


LUXMAN
AUTO REVERSE DOUBLE STEREO CASSETTE DECK K-008
A
B
POWER

Contents

Specifications 3
Controls and Jacks 4
Operation Guidelines ..... 5 to 7
Disassembly (Cabinet) ..... 8 to 10
Disassembly (Deck Mechanism) ..... 11 to 12
Adjustment ..... 13 to 16
Adjustment Locations ..... 17 to 19
Block Diagram ..... 20 to 22
Schematic Diagram ..... 23 to 33
Parts Layout on P.C. Boards and Wiring Diagram ..... 34 to 39
Electrical Parts List ..... 40 to 47
Packing Assembly Parts List 48
Packing Method View 48
Cabinet Assembly Parts List 49
Exploded View (Cabinet) ..... 50 to 51
Exploded View (A-Deck) ..... 52 to 53
Mechanism Assembly Parts List (A-Deck) 54
Mechanism Assembly Parts List (B-Deck) 55
Exploded View (B-Deck) ..... 56 to 57
Semi-Conductor Lead Identifications ..... 58 to 60

Spare Schematic Diagram Inserted

Specifications

at PLAYBACK : DECK A / B

Output Voltage (MTT-150)	550mV ± 1.5dB
S / N Ratio ("A" Cure WTD, MTT-150)	DOLBY OFF : 48dB B : 56dB C : 61dB
Distortion (MTT-150, DOLBY OFF)	2.5%
Frequency Response (MTT-216)	31.5Hz to 14kHz (± 4dB)
Crosstalk (MTT-121)	55dB
Stereo Separation (MTT-141)	35dB

at RECORD : DECK B

Input Sensitivity (400Hz)	(Line In) 150mV ± 2dB
Output Voltage (400Hz)	550mV ± 3dB
S / N Ratio ("A" Curve WTD, Metal Position from 400Hz 3% THD. Point)	DOLBY OFF : 49dB B : 57dB C : 62dB
Distortion (400Hz Dolby Level)	3%
Frequency Response (-25dB Rec. Dolby OFF)	NORMAL : 30Hz to 15kHz (+5dB, -6dB) CrO_2 : 30Hz to 16kHz (+5dB, -6dB) Metal : 30Hz to 16kHz (+5dB, -6dB)
Crosstalk (MTT-121)	55dB
Stereo Separation (MTT-141)	35dB

at RECORD : DUBBING

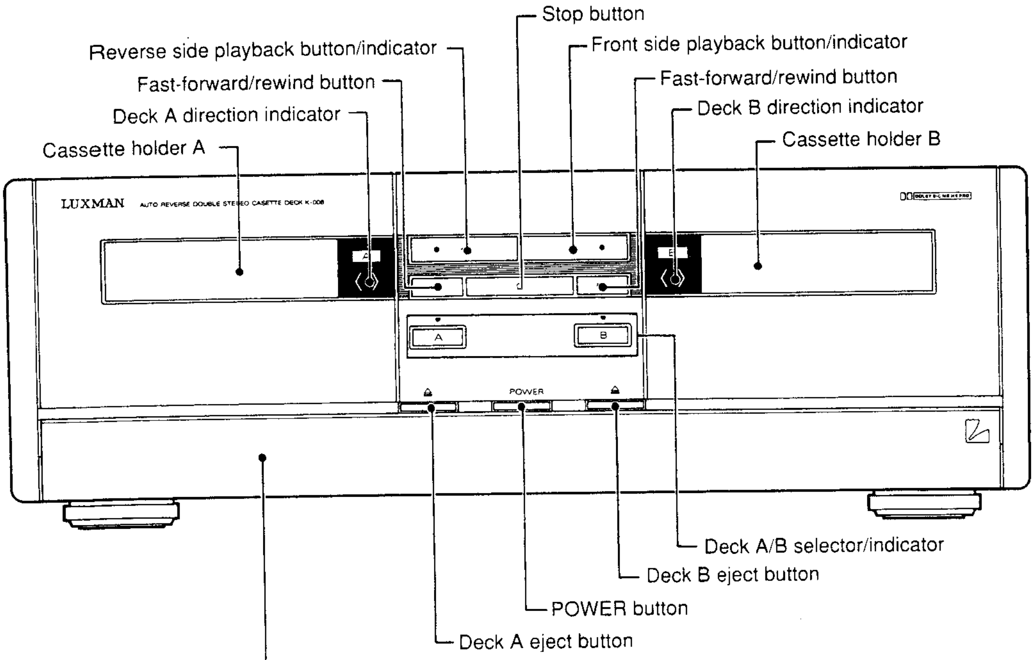
Output Voltage (MTT-150)	550mV ± 3dB
S / N Ratio ("A" Curve WTD, Metal Position, from Blank Tape P / B)	Dolby OFF : 47dB B : 55dB C : 60dB
Distortion (MTT-150)	3%
Frequency Response (-25dB Rec. Dolby OFF)	30Hz to 12.5kHz (-8dB, +6dB, DUB × 1) 30Hz to 10kHz (-8dB, +6dB, DUB × 2)
Crosstalk (MTT-121)	55dB
Stereo Separation (MTT-141)	35dB

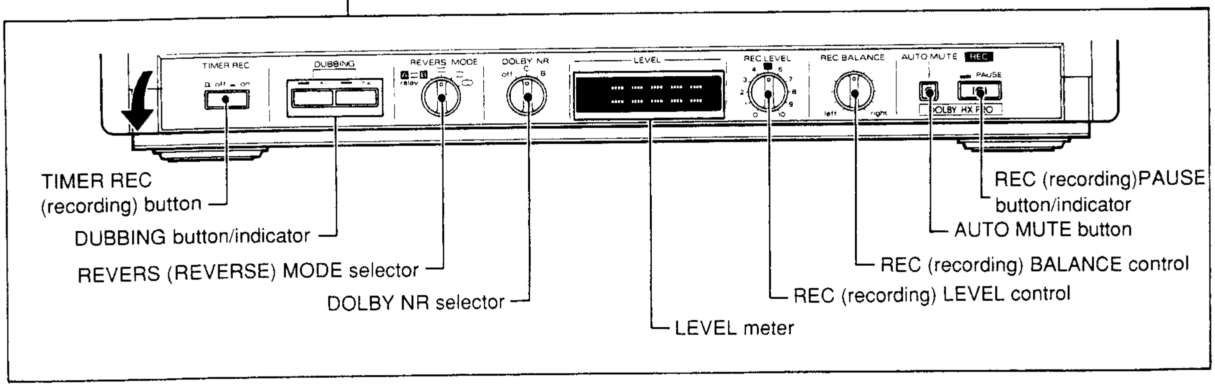
at GENERAL

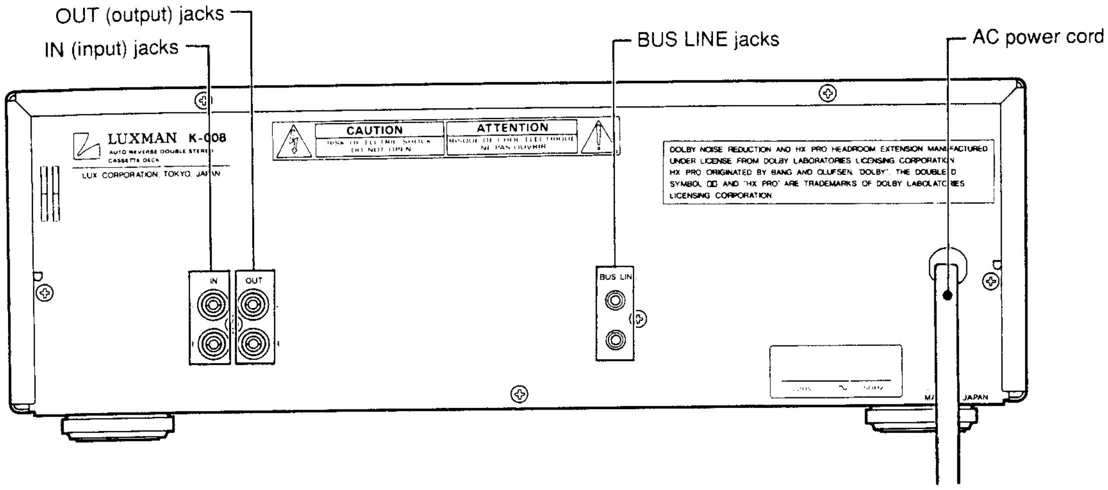
Tape Speed (MTT-111)	4.76cm / sec. ± 1.5% (NORMAL, DUB × 1) 9.52cm / sec. ± 1.5% (DUB × 2)
Wow & Flutter (JIS WTD, MTT-111)	0.12%
FF / REW Time (C-60)	110sec.
Take Up Torque	30 to 70g · cm
FF / REW Torque	90 to 180g · cm
Power Supply Voltage	AC220 / 240V, 50Hz
Power Consumption	30W
Load Impedance	47kohm
Semiconductors	12 IC's, 167 Transistors, 84 Diodes, 15 Zener Diodes
Dimensions	360(W) × 125(H) × 344(D)mm
Weight	6kg

Note : Due to continuing product improvement, specifications and designs are subject to change without notice.

Controls and Jacks


Stop button
Reverse side playback button/indicator
Front side playback button/indicator
Fast-forward/rewind button
Fast-forward/rewind button
Deck A direction indicator
Deck B direction indicator
Cassette holder A
Cassette holder B
LUXMAN
POWER
A
B
Deck A/B selector/indicator
Deck B eject button
POWER button
Deck A eject button


TIMER REC
DUBBING
REVERS MODE
DOLBY NR
LEVEL
REC LEVEL
REC BALANCE
AUTO MUTE
REC
PAUSE
DOLBY HX PRO
TIMER REC (recording) button
DUBBING button/indicator
REVERS (REVERSE) MODE selector
DOLBY NR selector
LEVEL meter
REC (recording) LEVEL control
REC (recording) BALANCE control
AUTO MUTE button
REC (recording)PAUSE button/indicator


OUT (output) jacks
IN (input) jacks
BUS LINE jacks
AC power cord
LUXMAN K-008
LUX CORPORATION TOKYO JAPAN
CAUTION
ATTENTION
IN
OUT
BUS LINE
JAPAN

Operation Guidelines

CASSETTE INSERTION

- Turn the power on.
- Press the eject button A or B to open each cassette holder.
- Insert a cassette in the cassette holder.
- Deck A is for playback only, and no recording can be performed.
- Press the cassette holder until it is restored to the unit.
- When the cassette tape is set in place, the unit detects the cassette type and sets the optimum equalizer bias automatically.
- When recording on deck B, make sure that the tab to prevent accidental erasure is not removed. If it has been removed, the accidental erasure preventive mechanism functions and neither recording, dubbing nor blank-searching can be performed.
- Select the desired Dolby NR system with the DOLBY NR selector. Select the same system for playback as that used for recording.

RECORDING

- Insert the cassette for recording in deck B, with side A facing you.
- The deck is selected automatically by inserting a cassette without pressing the deck A/B selectors.
- If the tab to prevent accidental erasure has been removed, the accidental erasure preventive mechanism funcions and no recording can be performed. When you use such cassette for recording, apply plastic tape or equivalent on the tab position.
- Select the desired Dolby NR system with the DOLBY NR selector.
- Select the reverse mode with the REVERS MODE selector.

⇌ .... When recording on one side of the tape is completed, the tape stops.

⊃ ⟲ A⇌B .... When recording on side A is completed, the head reverses to the beginning of side B.
And when recording on side B is completed, the tape stops.

- Press the REC PAUSE botton. The unit enters recording pause mode and is ready to record. (The pause indicator lights.)
- Select the program source to be recorded with the REC SELECTOR of the A-008 amplifier.
- Turn the REC LEVEL control so that the maximum peak level meter reading is between 0 dB and +3dB.
- When the recording levels are uneven for the right and left channels, turn the REC BALANCE control until they are balanced.
- Press the front side playback button (▶) in recording pause mode. Recording on the front side starts.
- By pressing the AUTO MUTE button in recording pause mode or during recording, about 4 seconds interspacing is provided. If the button is kept pressed, more than 4 seconds blank can be inserted.
- To pause during recording, press the REC PAUSE button. To stop recording, press the stop button.

LOCATING A BLANK PORTION ON THE RECORDED TAPE - BLANK SEARCH FUNCTION

More than 3 minutes blank portion on the recorded tape can be located easily.

- Insert the cassette whose blank is to be located in deck B.
- Blank search does not function on the cassette without a tab to prevent accidental erasure or on deckA.
- Press the REC PAUSE button to turn on the indicator.
- Press the fast forward/rewind (◀◀ , ▶▶) button.
- The unit locates a blank in fast forward mode and enters pause mode after about 4 seconds from the beginning of the blank portion.

PLAYBACK

- Insert the cassette for playback in deck A or B.
- The deck is selected by inserting a cassette without pressing the deck A/B selector.
- Select the desired Dolby NR system with the DOLBY NR selector. Be sure to select the same system for playback as that used for recording. Otherwise, playback may not be performed properly.
- Select reverse mode with the REVERS MODE selector.

⇌ ...... When playback of one side is completed, the tape stops.

⊃ ...... After completing playback of front side, the reverse side is played back. When playback of both sides is completed, the tape stops.

⊂⊃ ...... The front and the reverse sides are played back continuously.

A ⇄ B ...... After completing playback of both sides of the tape in deck A, both sides of the tape in deck B are played back. This cycle is repeated up to 8 times. (Refer to "Relay playback" for detail.)

- ● Select "TAPE" (the jack to which this unit is connected) of the input select buttons of the A-008 amplifier.
- ● Press either playback button to play back the cassette.

▶ .... Front side of the cassette is played back.

◀ .... Reverse side of the cassette is played back.

- By pressing ▶▶ or ◀◀ button during playback, you can locate the beginning of track. You can continue locating forward or reverse up to 8 tracks and start playback from the beginning of the track.
- During playback, if you change the deck to another one by pressing the deck A/B selector, the playback on the previous deck stops.
- ● Adjust the volume with the volume control of the A-008 amplifier.

RELAY PLAYBACK

- ● Insert cassettes in both deck A and B.
- The deck in which the cassette is inserted later is selected without pressing the deck A/B selector.
- ● Select the desired Dolby NR system with the DOLBY NR selector. Be sure to select the same system for playback as that used for recording. Otherwise, playback may not be performed properly.
- ● Select "A ⇄ B" with the REVERS MODE selector.
- ● Select deck A with the deck A/B selector. Then press ▶ button to play back the front side of the cassette.
- After playback of the cassette on deck A is completed, the cassette on deck B is played back. This cycle is repeated up to 8 times.

FAST FORWARD/REWINDING

- ● Select the deck to activate fast forwarding or rewinding with the deck A/B selector.
- ● In stop mode, press ◀◀ button or ▶▶ button.
  To fast forward, press the button of the same direction as that shown by the direction indicator. To rewind, press the button of the opposite direction.
- Pressing ◀◀ or ▶▶ button during playback locates the beginning of track. Neither fast forward nor rewinding can be done.
  To fast forward or rewind during playback, stop playback with the stop button. Then press ◀◀ or ▶▶ button.

TO LOCATE THE BEGINNING OF TRACK

You can locate the beginning of track by pressing the fast forward or rewind button during playback.

- ● During playback of the front side (▶), press ▶▶ to locate tracks after that track. Press ◀◀ to locate tracks before that track.
- ● During playback of the reverse side(◀), press ▶▶ to locate tracks before that track. Press ◀◀ to locate tracks after that track.
- When you start locating at the interspace between tracks, up to 8 tracks each forward and backward can be located.
  When the backward locating is started during playback, the present track is located as the first one and more 7 tracks can be located. When the forward locating is started during playback, 8 tracks can be located.

DUBBING

- ● Insert a recorded cassette in deck A and a cassette for recording in deck B.
- The deck in which the cassette is inserted later is selected without pressing the deck A/B selector.
- ● Press the X1 or X2 dubbing button.
  To perform dubbing at normal speed, press X1.
  To perform dubbing at double speed, press X2.
  By pressing of the dubbing button, deck A enters playback mode and simultaneously deck B enters recording mode.
- The dubbing on deck B is performed with the same recording level and Dolby NR system as those applied when the tape on deck A was recorded.
- During dubbing, the REC LEVEL control and REC BALANCE control do not function.
- ● When the REC PAUSE button or the AUTO MUTE button is pressed during dubbing, about 4 second interspace is provided on the tape on deck B, and the unit enters pause mode.
  To resume dubbing, press the blinking dubbing button.

- To stop dubbing, press the stop button.
  (Dubbing mode is automatically cleared when the tape on deck B reaches its end.)

If the unit is connected with an L component system (A-008, D-008, T-008, etc.), the remote control, timer-activated playback/recording, synchronized recording, etc. can be performed.

REMOTE CONTROL

When the BUS LINE jacks of an L component system are connected, you can operate the following buttons on the RA-008 remote control unit supplied with the A-008 amplifier. For further details, refer to the owners' manual of the A-008 amplifier.

Fast forward/rewind button	◁◁ ▷▷
Reverse side playback button	• ◁
Front side playback button	▷ •
Deck A/B selector	A B
Stop button	□
REC PAUSE button	❙●❙
AUTO MUTE button	⧇

TIMER-ACTIVATED PLAYBACK/RECORDING

- When the BUS LINE jacks of the L component system are connected, timer-activated playback/recording can be performed with the timer built in the T-008 tuner.
- Set the starting and ending time for timer-activated playback/recording with the timer of the T-008 tuner. Press the timer button to turn on the timer indicator in the display window. For further details, refer to the owners' manual of the T-008 tuner.
- For timer-activated playback, select TAPE of the input select buttons of the A-008 amplifier.
  For timer-activated recording, select the program source to be recorded with the REC SELECTOR of the A-008 amplifier. Also set the program source so that the unit is set to playback mode on the preset time for timer-activated recording. For further details, refer to the owners' manual of the A-008 amplifier.
- Insert the cassette for timer-activated playback or for timer-activated recording.
- Set the cassette for timer-activated recording on deck B. Make sure that the tab to prevent accidental erasure is not removed.
- Depress the TIMER REC button of this unit (ON).
- Press the POWER button of the A-008 amplifier to turn off the power of the L component system.
- Timer-activated playback or timer-activated recording will be performed at the preset time with the T-008 tuner.

SYNCHRONIZED RECORDING

When the BUS LINE jacks of the L component system are connected, synchronized recording (this unit is set to recording mode simultaneously with CD playing) can be performed simply by pressing the "synchro" button of the A-008 amplifier.

- Insert the cassette for recording in deck B.
- Adjust the recording level and balance.
- Press CD of the input select buttons and set REC SELECTOR to CD/ex.digital on the A-008 amplifier. For details, refer to the owner's manual of the A-008 amplifier.
- Load a compact disc on the D-008 compact disc player. For details, refer to the owners' manual of the D-008 compact disc player.
- Press the "synchro" button of the A-008 amplifier. D-008 starts playing and simultaneously this unit starts recording.
- When CD playing is paused during synchronized recording, this unit provides about 4 seconds blank on the tape and enters pause mode.
  When the REC PAUSE button of this unit is pressed during sychronized recording, on the contrary, the D-008 compact disc player stops play simultaneously.
- When CD playing is stopped during synchronized recording, this unit provides about 4 seconds blank on the tape and stops recording.
  When the stop button of this unit is pressed during synchronized recording, on the contrary, the D-008 compact disc player stops play simultaneously.

Disassembly (Cabinet)

1. Removal of Front Panel

(1) After removal of the Top Cover, remove four screws marked "○" as shown in Figure 1.

(2) Disconnect all wires from the Deck Mechanism (A) / (B), Key Switch P.C.Board, REC Pause P.C.Board, REV Mode Switch P.C.Board, REC Volume P.C.Board, Dubbing Switch P.C.Board, and DIR Indicator P.C.Board (A) / (B).

(3) Front Panel with the Deck Mechanism (A) / (B), Key Switch P.C.Board, REC Pause P.C.Board, REV Mode Switch P.C.Board, REC Volume P.C.Board, Dubbing Switch P.C.Board and DIR Indicator P.C.Board (A) / (B) can be removed completely.

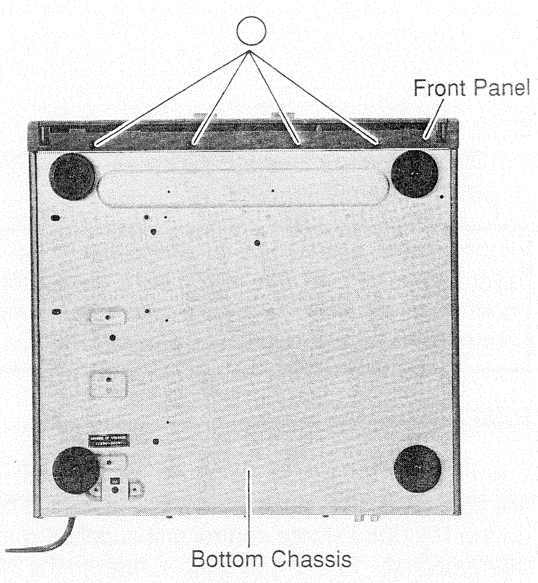

○
Front Panel
Bottom Chassis

Figure 1

2. Removal of Deck Mechanism (A)

(1) After removal of the Front Panel, remove a Spring as shown in Figure 3.

Note : When the Eject Switch lever is pressed, the Spring removed in 2 - (1) is released and the Eject Switch Spring, apply bond to each end of the Spring.

(2) Remove four screws marked "X" as shown in Figure 2.

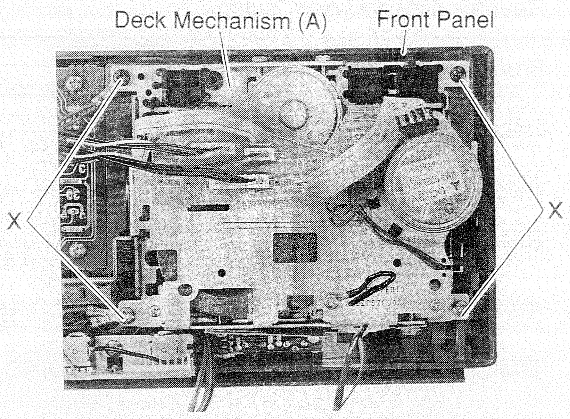

Deck Mechanism (A)
Front Panel
X
X

Figure 2

3. Removal of Deck Mechanism (B)

(1) Remove four screws and a Spring as same as removing the Deck Mechanism (A).

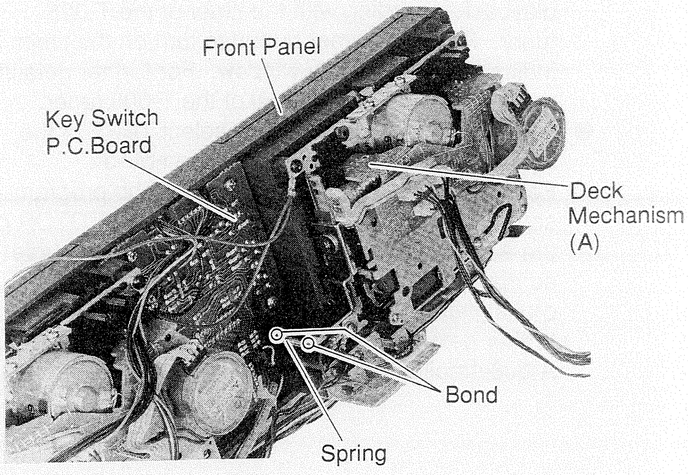

Front Panel
Key Switch
P.C.Board
Deck
Mechanism
(A)
Bond
Spring

Figure 3

4. Removal of DIR Indicator P.C.Board (A)

(1) After removal of the Deck Mechanism (A), open the Cassette Holder.

(2) Remove the Cassette Cover in the direction of the arrow as shown in Figure 4.

(3) Remove two Hooks (A) as shown in Figure 5.

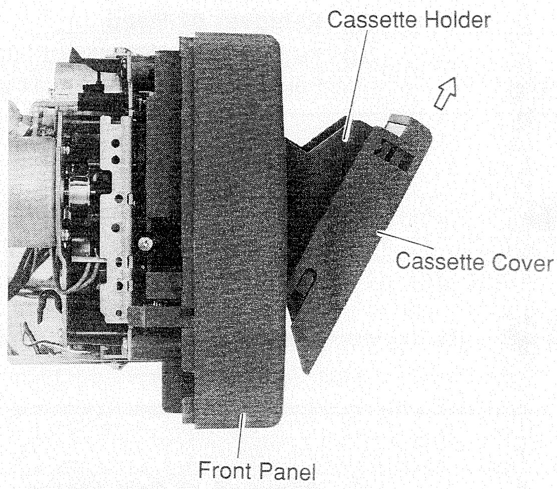

Cassette Holder
Cassette Cover
Front Panel

Figure 4

5. Removal of DIR Indicator P.C.Board (B)

(1) After removal of the Deck Mechanism (B), remove the Cassette Cover and two Hooks as same as removing the DIR Indicator P.C.Board (A).

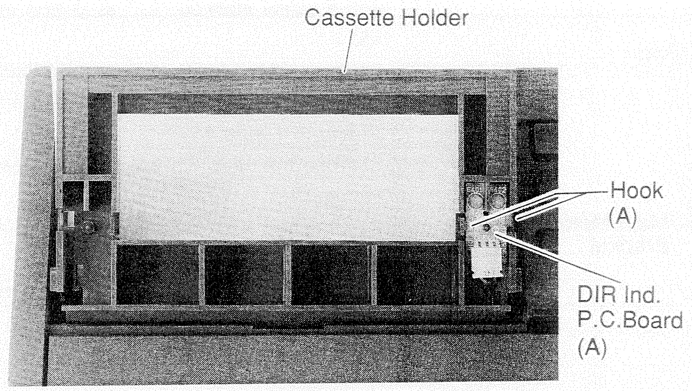

Cassette Holder
Hook
(A)
DIR Ind.
P.C.Board
(A)

Figure 5

6. Removal of Dolby P.C.Board

(1) After removal of the Top Cover, remove two Support P.C.Boards (A), by pushing the "B" point as shown in Figures 6 and 7.

(2) Disconnect all connectors from the P.C.Board.

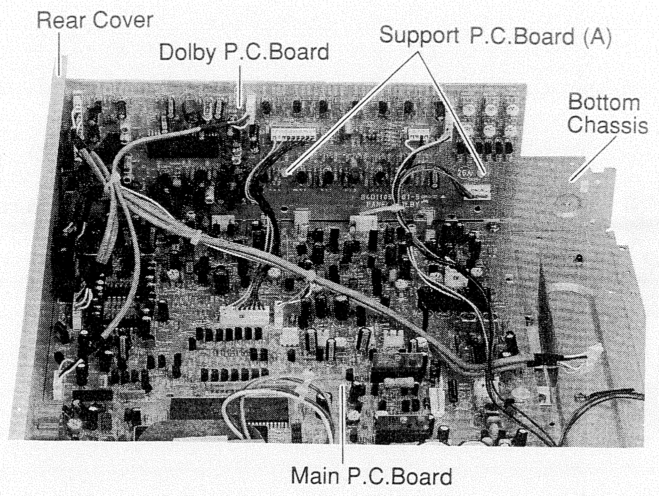

Rear Cover
Dolby P.C.Board
Support P.C.Board (A)
Bottom
Chassis
Main P.C.Board

Figure 6

7. Removal of Main P.C.Board

(1) After removal of the Front Panel and Dolby P.C.Board, remove five screws marked "△" as shown in Figures 8 and 9.

(2) Remove four Support P.C.Boards (B), by pushing "B" point as shown in Figures 7 and 8.

(3) Disconnect all wires from the P.C.Board.

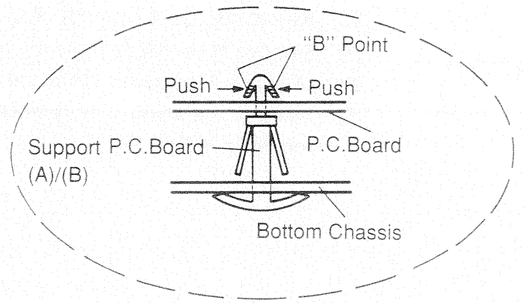

"B" Point
Push
Push
Support P.C.Board
(A)/(B)
P.C.Board
Bottom Chassis

Figure 7

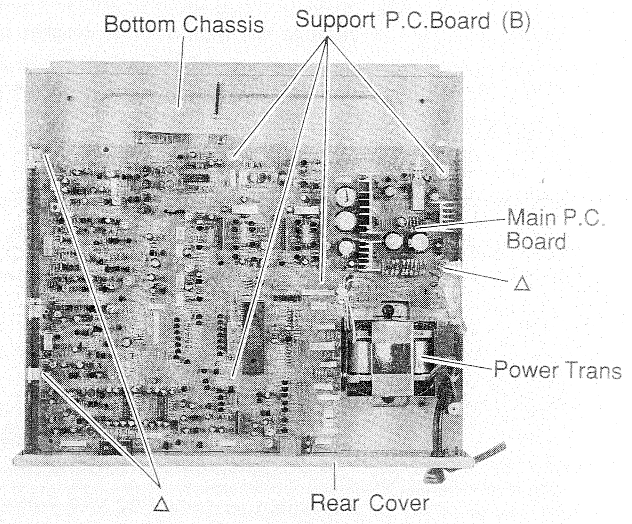

Bottom Chassis
Support P.C.Board (B)
Main P.C.
Board
△
Power Trans
△
Rear Cover

Figure 8

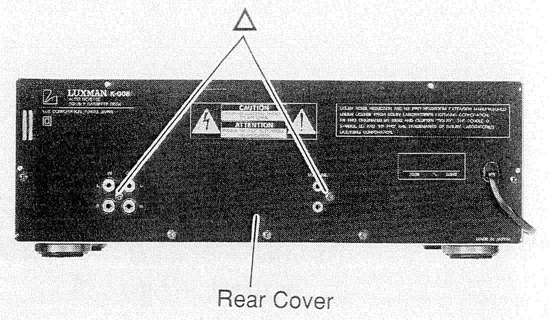


Figure 9

Disassembly (Deck Mechanism)

1. Removal of Control P.C.Board - (1) to (3)

(1) Remove three Hooks (A) as shown in Figures 10 and 11.

(2) Disconnect all wires from the Control P.C.Board - (1).

(3) Pull out the arrow, by removing two Hooks (B) as shown in Figure 10

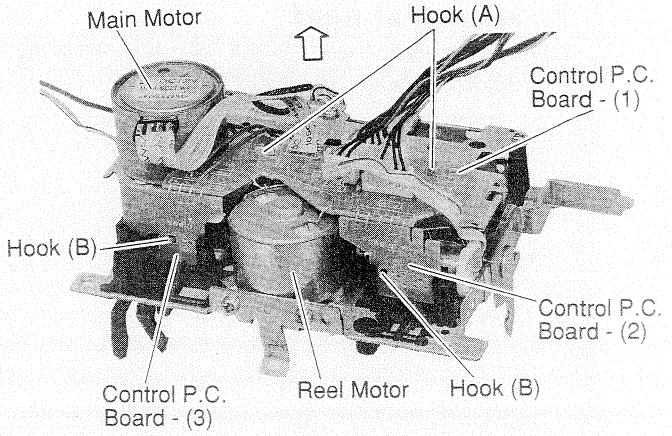

Main Motor
Hook (A)
Control P.C. Board - (1)
Hook (B)
Control P.C. Board - (2)
Control P.C. Board - (3)
Reel Motor
Hook (B)

Figure 10

2. Removal of Main Motor

(1) After removal of the Control P.C.Board - (1) to (3), remove the Main Motor Bracket by removing three screws marked "○" as shown in Figure 11.

(2) Remove two screws marked " × " as shown in Figure 12.

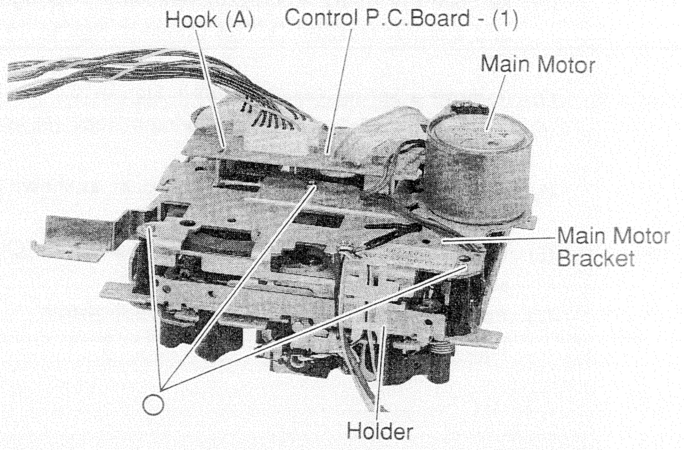

Hook (A)
Control P.C.Board - (1)
Main Motor
Main Motor Bracket
○
Holder

Figure 11

3. Removal of Control P.C.Board - (4)

(1) After removal of the Main Motor Bracket, remove two Flywheels by removing two Washers (A) as shown in Figures 13 and 14.

(2) Remove the Hook (B) as shown in Figure 15.

4. Removal of Control P.C.Board - (5)

(1) After removal of two Flywheels, remove two Hook (C) as shown in Figure 15.

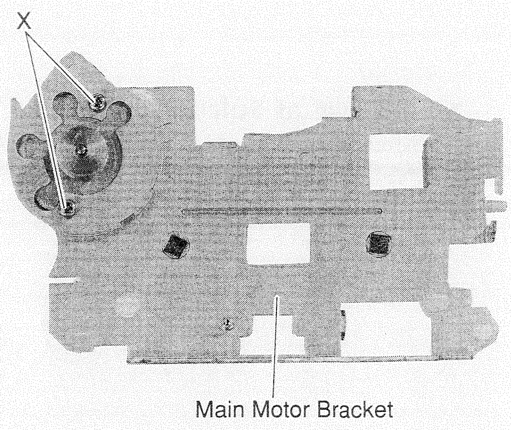

X
Main Motor Bracket

Figure 12

5. Removal of Head

(1) Remove two screws marked "△" after removing the Holder as shown in Figures 11 and 14.

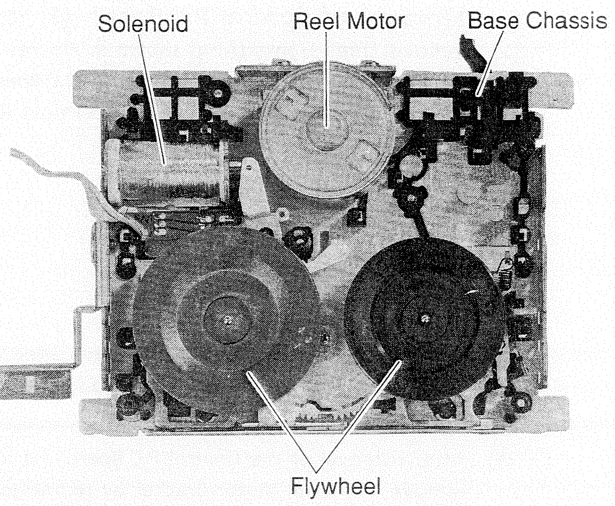

Solenoid
Reel Motor
Base Chassis
Flywheel

Figure 13

6. Removal of Reel Motor

(1) After removal of two Flywheels, remove two Pinch Rollers by removing two Hooks (D) as shown in Figure 14.
(2) Remove the Head Bracket, by removing a Spring (A) and a screw marked "□" as shown in Figures 14 and 15.
(3) Remove a Spring (B) as shown in Figure 15.
(4) Remove the Play Arm by removing a Hook (E) as shown in Figure 15.
(5) Remove the Slide Plate with Cam Gear as shown in Figure 15.
(6) Remove the Hold Lever by removing a Spring (C) as shown in Figure 14.
(7) Remove two screws marked "※" as shown in Figure 14.

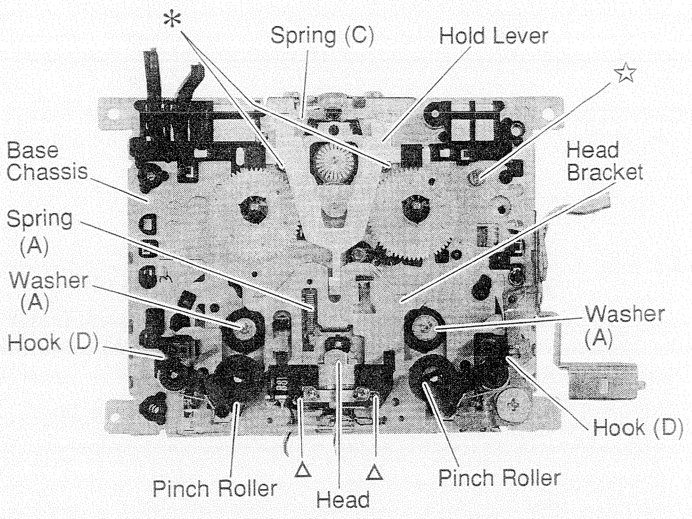

*
Spring (C)
Hold Lever
☆
Base Chassis
Head Bracket
Spring (A)
Washer (A)
Washer (A)
Hook (D)
Hook (D)
Pinch Roller
△
Head
△
Pinch Roller

Figure 14

7. Removal of Solenoid

(1) After removal of the Play Arm, remove a screw marked "☆" as shown in Figure 14.

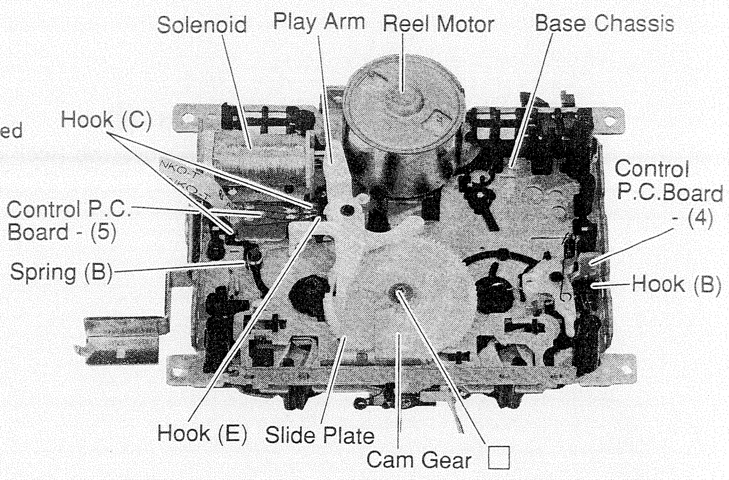

Solenoid
Play Arm
Reel Motor
Base Chassis
Hook (C)
Control P.C. Board - (5)
Spring (B)
Control P.C.Board - (4)
Hook (B)
Hook (E)
Slide Plate
Cam Gear □

Figure 15

Adjustment

1. Quick Reverse Adjustment

(1) Make the connections as shown in figure 16 and turn the power ON.

(2) Insert a blank tape into deck A and adjust VR6061 so that the TP6002 output is 2V DC when the tape is played back.

(3) Insert a blank tape into deck B as in (2) for deck A, and adjust VR6062 so that the TP6001 output is 2V DC when the tape is played back.

(4) Insert test tape AC712 into both decks and make sure that the TP6002 and TP6001 outputs are 0.6V or less (preferably lower) when the tape is played back.

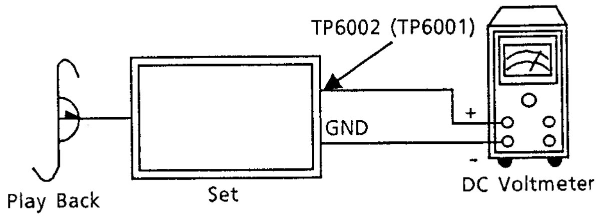


Figure 16

2. Tape Speed (Double Speed Dubbing) Adjustment

(1) Make the connections as shown in Figure 17 and turn the power ON.

(2) Ground TP6071, insert the test tape MTT-111N (3kHz, -10dB) into deck A and play it back. Adjust VR6072 so that the line output becomes 6,000Hz when the tape is played back.

(3) Ground TP6072 as in (2) for TP6071, insert the test tape into deck B and adjust VR6074 so that the line output becomes 6,000Hz when the tape is played back.

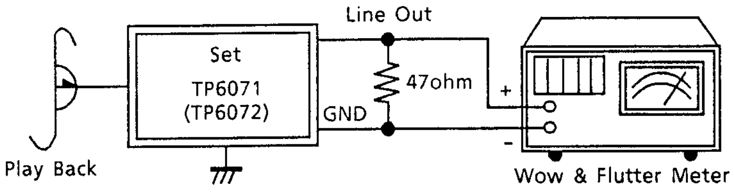


Figure 17

3. Tape Speed (Same Speed Dubbing) Adjustment

(1) Make the connections as shown in Figure 17 and turn the power ON.

(2) Insert test tape MTT-111N (3kHz, -10dB) into deck A and play it back. Adjust VR6071 so that the line output during playback becomes 3,000Hz i.e. that the wow and flutter is 0.14% (JIS WTD) or less.

(3) Insert test tape into deck B as in deck A and adjust VR6073 so that the line output becomes 3,000Hz when the tape is played back. Make sure that the wow and flutter at that time is 0.14% (JIS WTD) or less.

4. Playback Output Adjustment

(1) Make the connections as shown in Figure 18 and turn the power ON.

(2) Insert test tape MTT150 into deck A and play it back.
Adjust VR2001 (VR2002) so that the line output L (R) becomes 550mV.

(3) Insert the test tape into deck B as in deck A and adjust VR2101 (VR2102) so that the line output L (R) becomes 550mV.

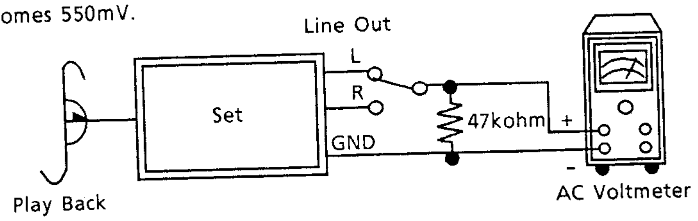


Figure 18

5. Head Azimuth Adjustment

(1) Make the connections as shown in figure 19 and turn the power ON.

(2) Insert test tape MTT114N (10kHz, -10dB) and play it back. Adjust the head azimuth adjustment screws of deck A, as shown in Figure 30, so that the right and left line outputs are maximum and have the same phase in both the normal and reverse direction.

(3) Insert the test tape into deck B as in deck A and adjust the head azimuth adjustment screws of deck B, as shown in Figure 31, so that the right and left line outputs are maximum and have the same phase in both the normal and reverse direction.

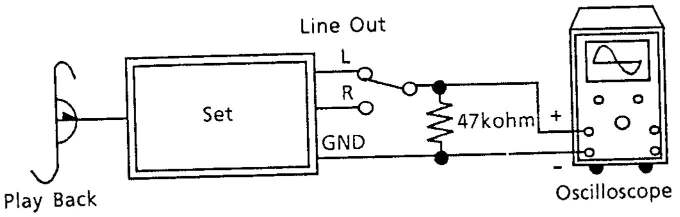


Figure 19

6. Input Sensitivity Check

(1) Make the connections as shown in Figure 20 and turn the power ON.

(2) Insert the metal tape (TDK AC-712) into deck B and set to REC PLAY mode. Set the REC LEVEL volume to the maximum.

(3) Input the 400Hz/150mV ±2dB (oscillator output) signal into the line input in the mode set in (2) and make sure that the line output is 550mV at that time.

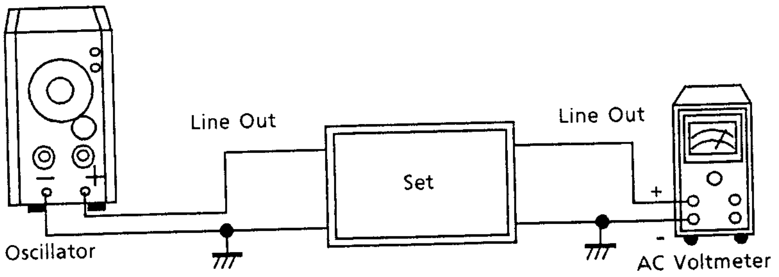


Figure 20

7. Meter Adjustment

(1) Make the connections as shown in Figure 20 and turn the power ON.

(2) Insert the metal tape (TDK AC-712) into deck B and set to REC PLAY mode. Set the REC LEVEL volume (Figure 25) to the maximum.

(3) Input the 400Hz/150mV ±2dB (oscillator output) signal to the line input in the mode set in (2), and adjust the line output to 550mV at that time. Adjust VR8001 (VR8002) observing the level meter of the set so that all the level indicator lamps of L (R) light up at once, and then readjust it so that the +6 indicator lamp gose out.

8. Bias Adjustment

(1) Make the connections as shown in Figure 21 and turn the power ON.

(2) Insert the metal tape (TDK AC-712) into deck B and set to REC PLAY mode.

(3) Adjust L5101 so that the TP5101 output becomes 105kHz ±0.1kHz in the mode set in (2).

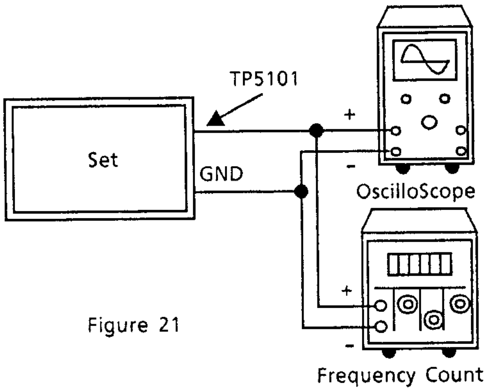

TP5101
Set
GND
+
-
OscilloScope
+
-
Frequency Counter

Figure 21

9. HX Coil Peak Adjustment

(1) Make the connections as shown in Figure 22 and turn the power ON.

(2) Insert the metal tape (TDK AC-712) into deck B and set to REC PLAY mode.

(3) Set the metal bias volume VR5071 (VR5072) to the maximum in the mode set in (2). Adjust L5051 (L5052) so that the output of TP5005 (TP5006) becomes maximum.

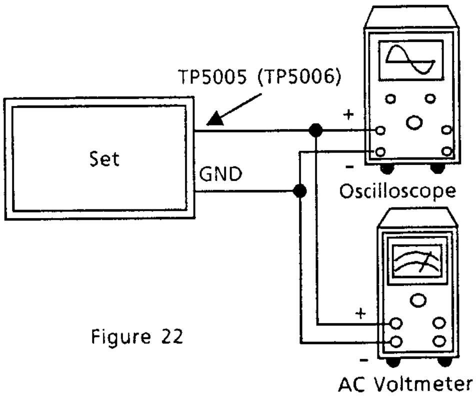

TP5005 (TP5006)
Set
GND
+
-
Oscilloscope
+
-
AC Voltmeter

Figure 22

10. REC/PLAY Adjustment

(1) After having finished the HX coil peak adjustment described in Item 9, temporarily adjust VR5071 (VR5072) so that the TP5005 (TP5006) output becomes 65mV.

(2) Make the connections as shown in Figure 23, input 400Hz/150mV ±2dB (oscillator output) to the line input, insert the metal tape (TDK AC-712) into deck B and record on it. (Set the REC LEVEL volume to the maximum.)

(3) Adjust VR5001 (VR5002) so that the line output L(R) becomes 550mV with a distortion of 1 to 2% when the recorded section is played back.

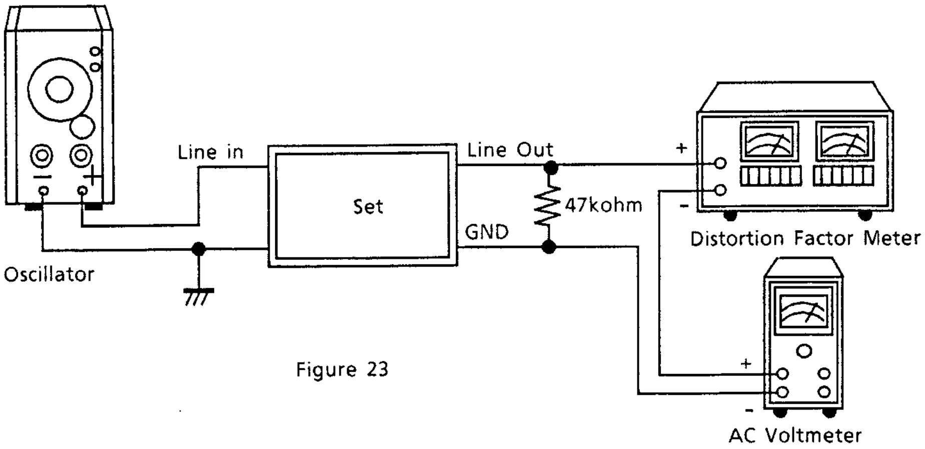

Oscillator
Line in
Set
Line Out
GND
47kohm
+
-
Distortion Factor Meter
+
-
AC Voltmeter

Figure 23

11. Adjustment of the REC/PLAY frequency response

(1) Make the connections as shown in figure 24 and turn the power ON.

(2) Insert the metal tape (TDK AC-712) into deck B and set to REC PLAY mode. Set the REC LEVEL volume to the maximum.

(3) Input the signal that has been reduced by 25dB from the 400Hz/150mV ±2dB signal (DOLBY LEVEL reference input) to the line input, and set the output value of the line output L (R) to the reference value.

(4) Adjust VR5071 (VR5072) so that the output value of the line output L (R) becomes equal to the reference value when the signal that has been reduced by 25dB from the 12.5kHz/150mV ±2dB signal is input to the line input.

(5) Insert the CrO_2 tape (TDK AC-512) as in (2), and set to REC PLAY model, Input the signal that has been reduced by 25dB from the 400Hz/150mV ±2dB signal (DOLBY LEVEL reference input), and set the output value of the line output L (R) to the reference value as in (3) and (4). Adjust VR5073 (VR5074) so that the output level when the 12.5kHz/-25dB signal is input becomes equal to the reference value.

(6) Insert the normal tape (TDK AC-223) as in (2), and set to REC PLAY mode. Input the signal that has been reduced by 25dB from the 400Hz/150mV ±2dB signal (DOLBY LEVEL reference input), and set the output value of the line output L (R) to the reference value as in (3) and (4). Adjust VR5075 (VR5076) so that the output level when the 12.5kHz/-25dB signal is input becomes equal to the reference value.

※ When making the adjustments, follow the Items 1 through 11 strictly in this order.

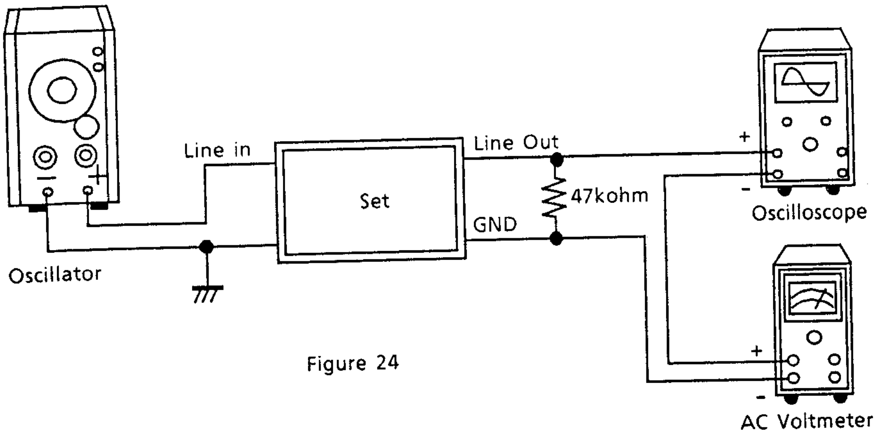
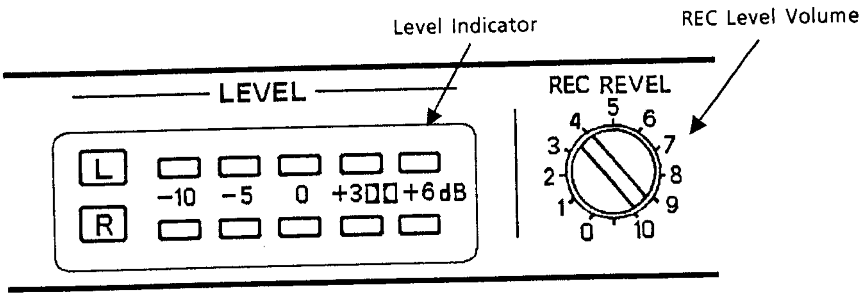


Figure 24



<Front Panel Part>

Figure 25

Adjustment Locations

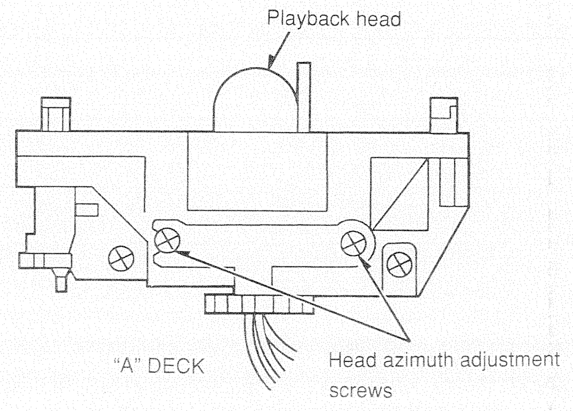

Playback head
"A" DECK
Head azimuth adjustment screws

Figure 26

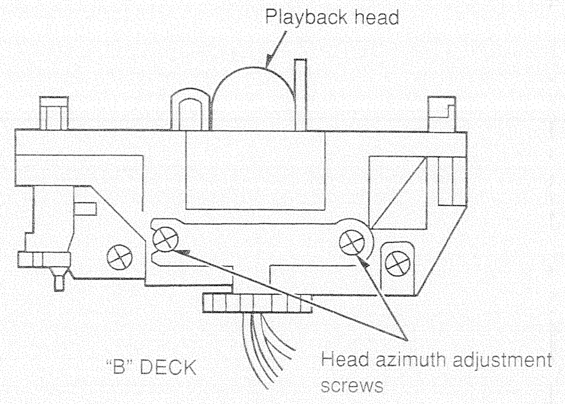

Playback head
"B" DECK
Head azimuth adjustment screws

Figure 27

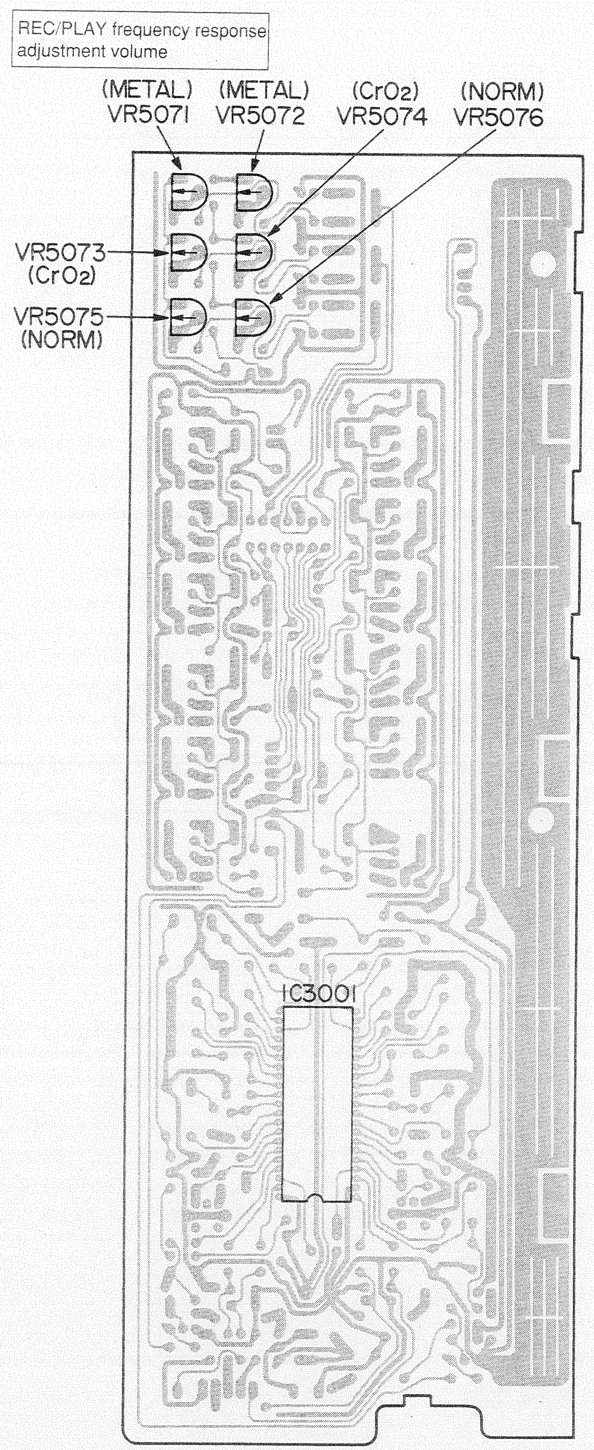

REC/PLAY frequency response adjustment volume
(METAL) VR5071
(METAL) VR5072
(CrO2) VR5074
(NORM) VR5076
VR5073 (CrO2)
VR5075 (NORM)
IC3001

Figure 28 Dolby P.C. Board (Component side)

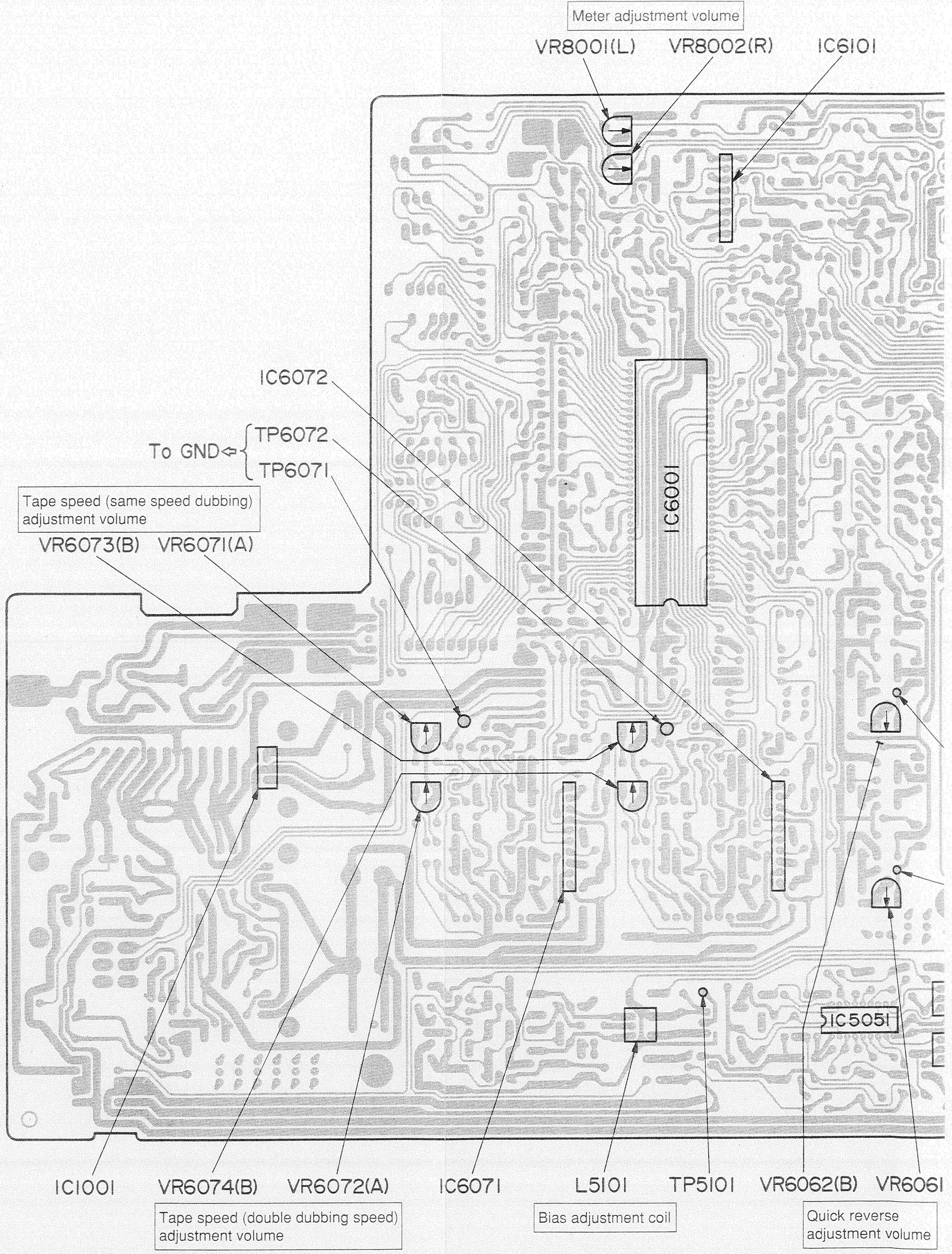
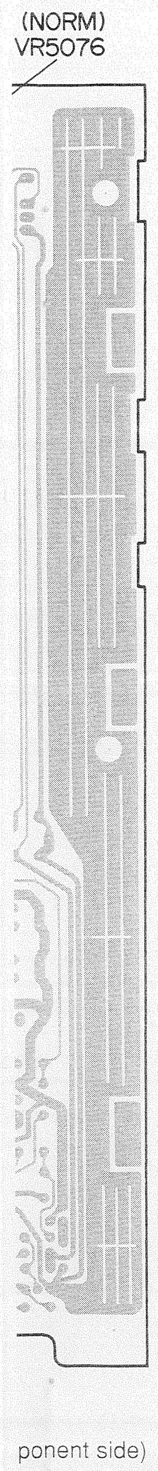

Meter adjustment volume
VR8001(L)
VR8002(R)
IC6101
IC6072
To GND
TP6072
TP6071
Tape speed (same speed dubbing) adjustment volume
VR6073(B)
VR6071(A)
IC6001
IC5051
IC1001
VR6074(B)
VR6072(A)
Tape speed (double dubbing speed) adjustment volume
IC6071
L5101
Bias adjustment coil
TP5101
VR6062(B)
VR6061
Quick reverse adjustment volume

Figure 29 Main P.C. Board (Component side)


(NORM)
VR5076
ponent side)

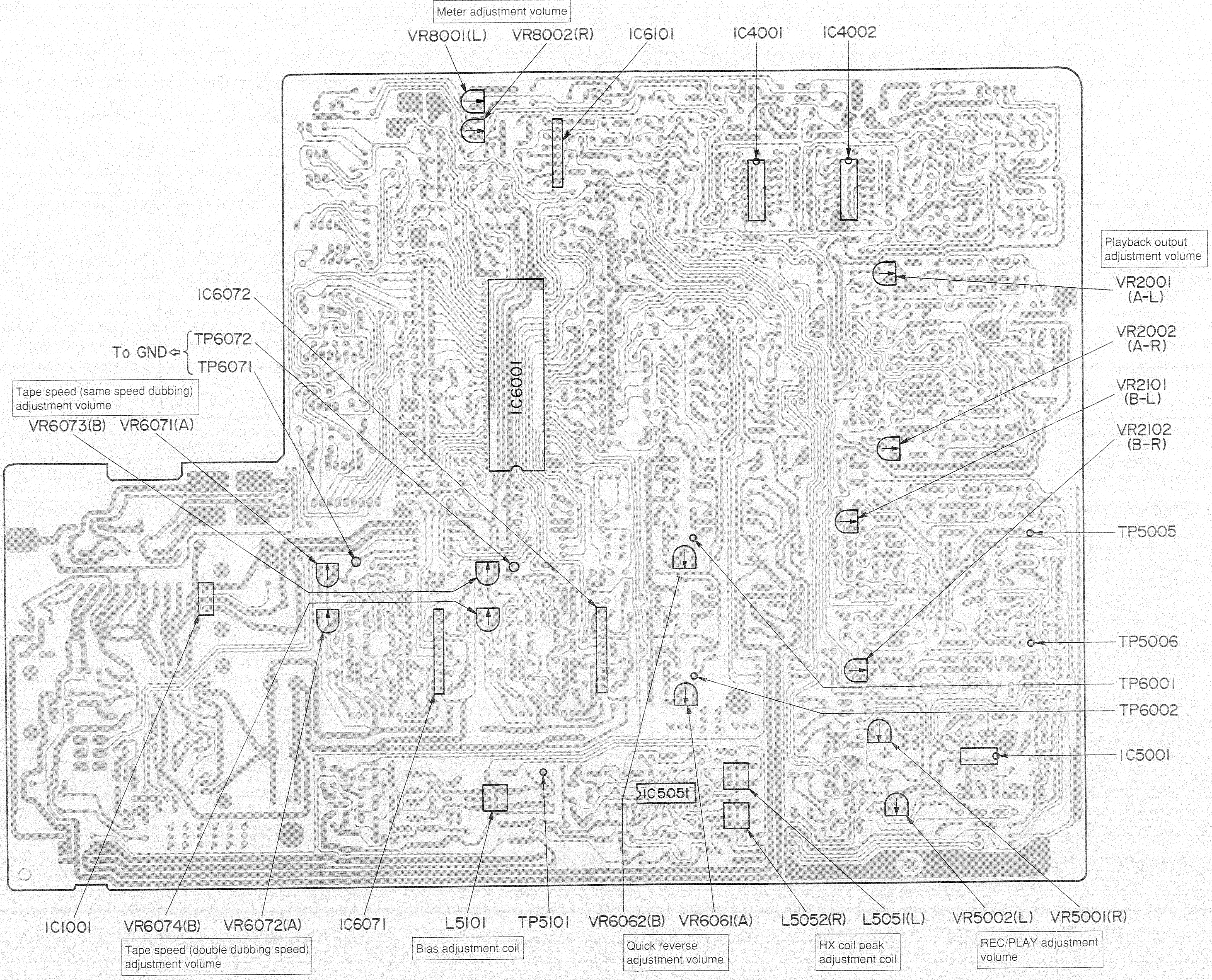
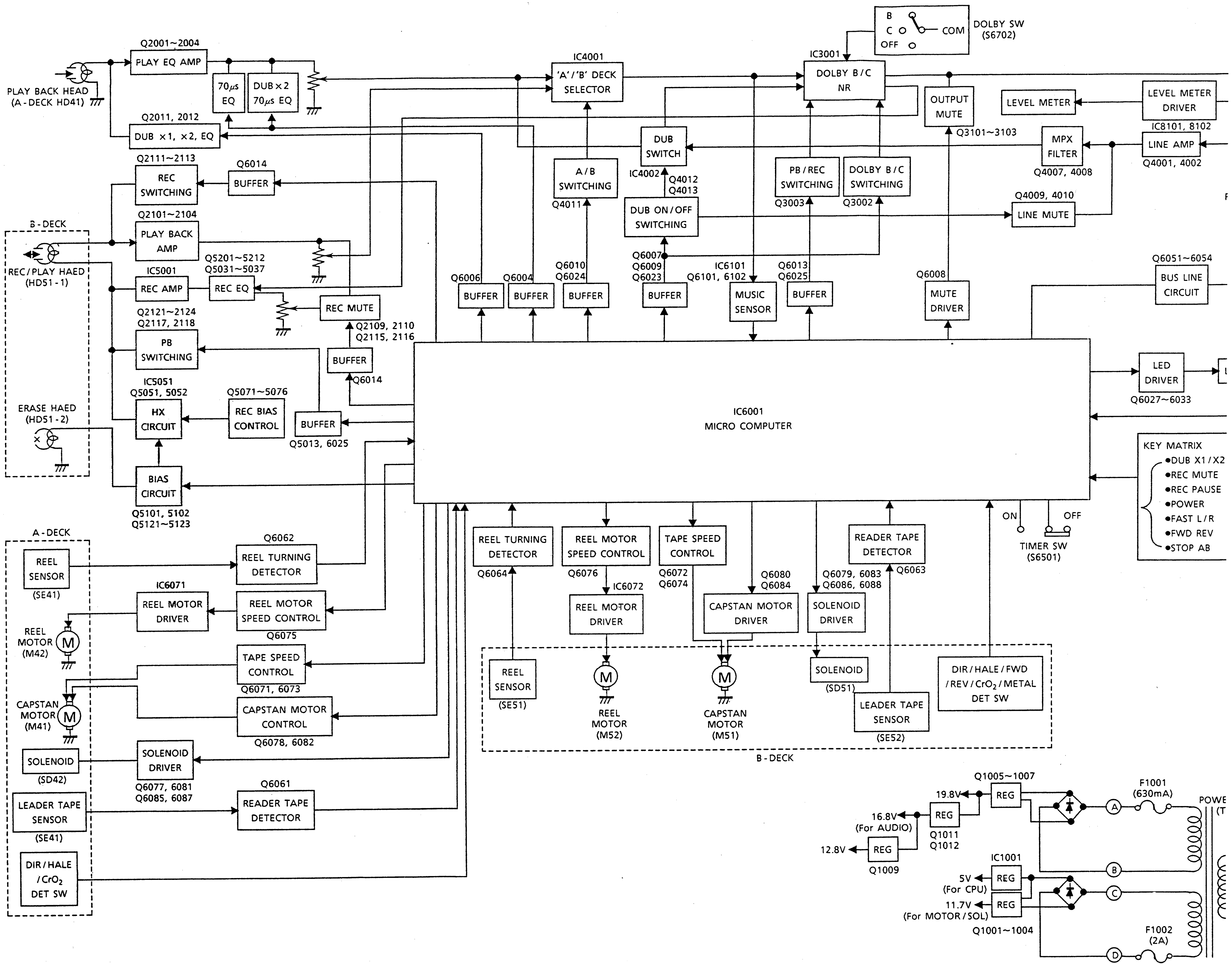
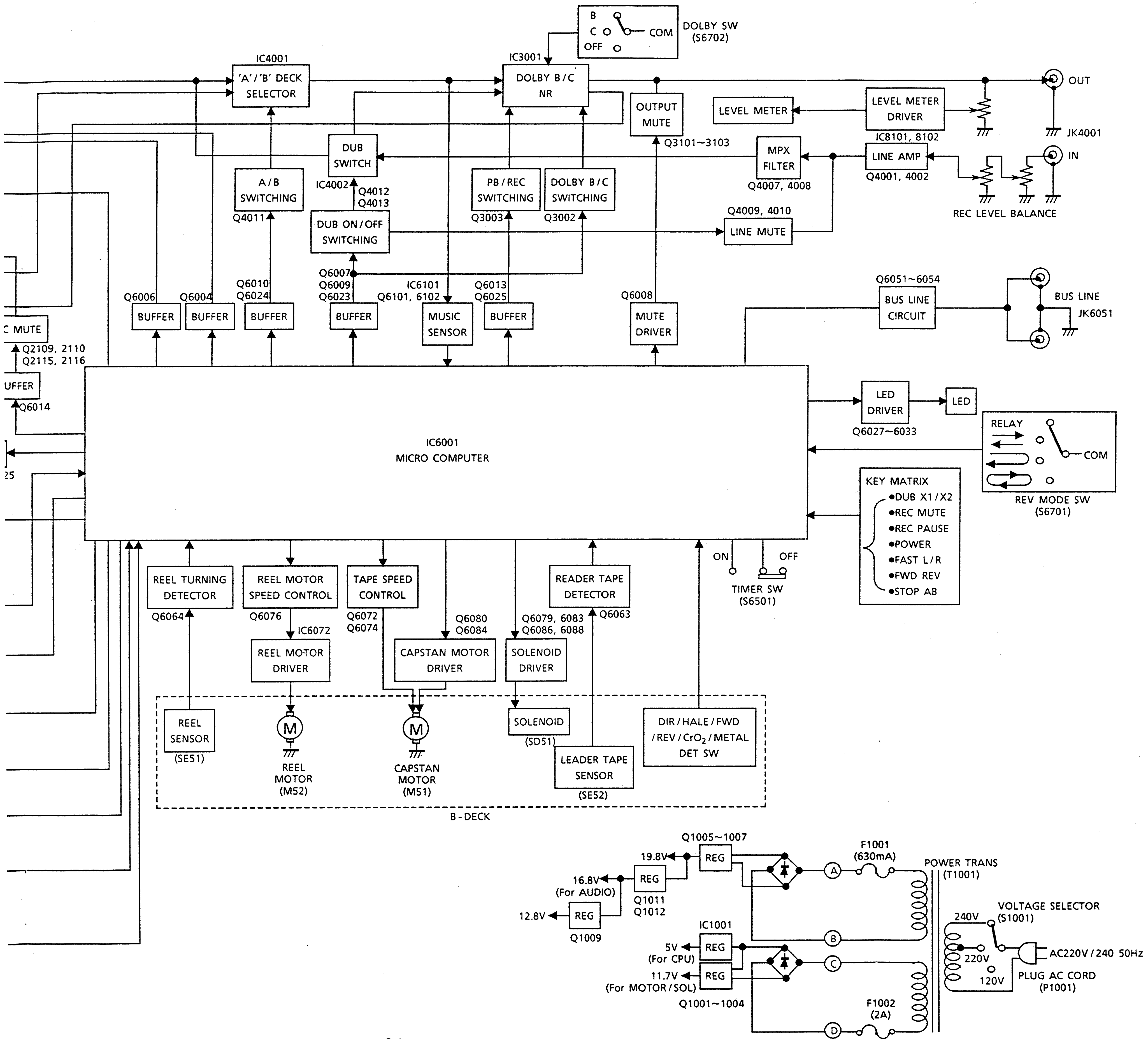

Meter adjustment volume
VR8001(L)
VR8002(R)
IC6101
IC4001
IC4002
IC6072
To GND
TP6072
TP6071
Tape speed (same speed dubbing) adjustment volume
VR6073(B)
VR6071(A)
IC6001
Playback output adjustment volume
VR2001 (A-L)
VR2002 (A-R)
VR2101 (B-L)
VR2102 (B-R)
TP5005
TP5006
TP6001
TP6002
IC5001
IC5051
IC1001
VR6074(B)
VR6072(A)
Tape speed (double dubbing speed) adjustment volume
IC6071
L5101
Bias adjustment coil
TP5101
VR6062(B)
VR6061(A)
Quick reverse adjustment volume
L5052(R)
L5051(L)
HX coil peak adjustment coil
VR5002(L)
VR5001(R)
REC/PLAY adjustment volume

Figure 29 Main P.C. Board (Component side)

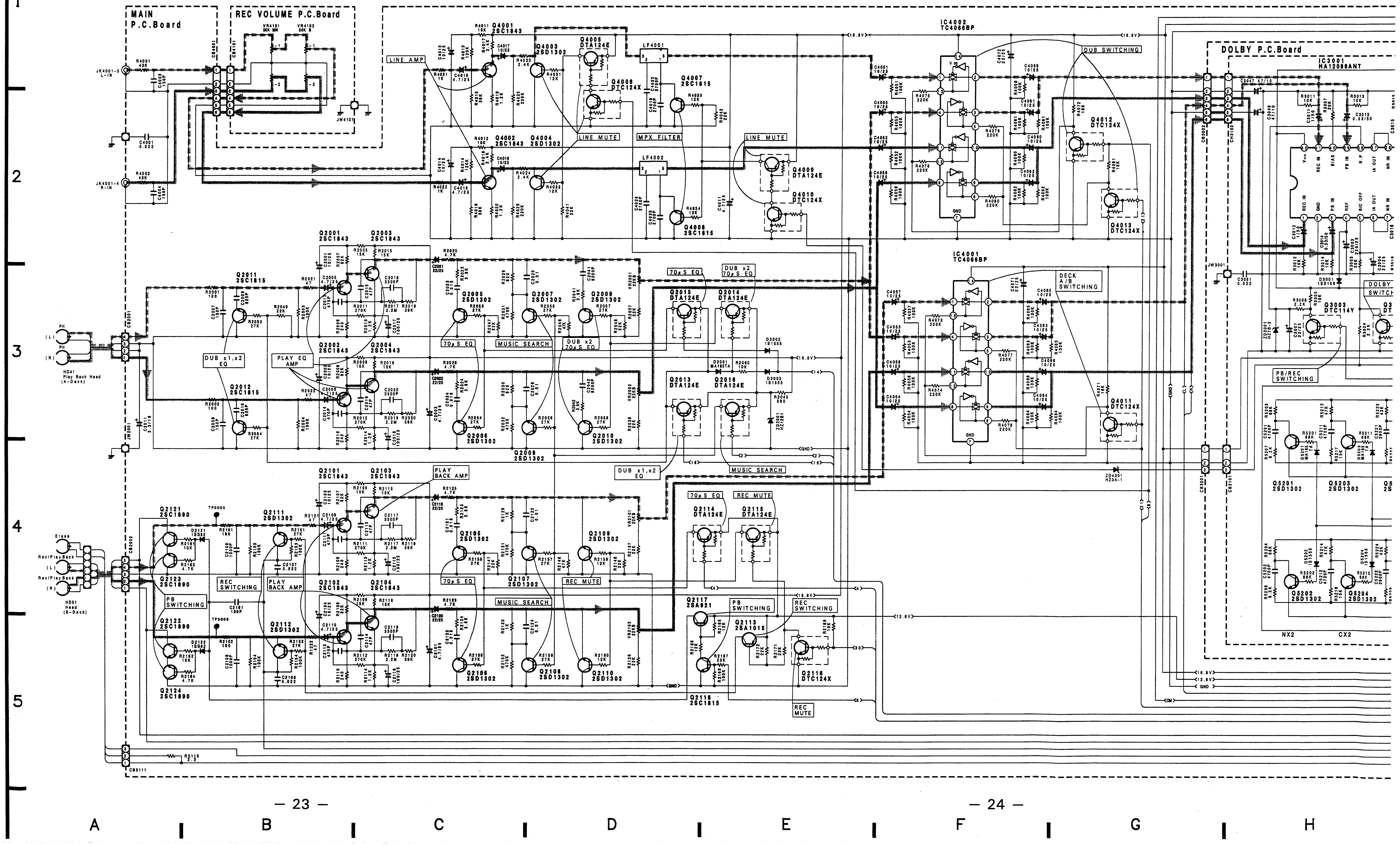
Block Diagram

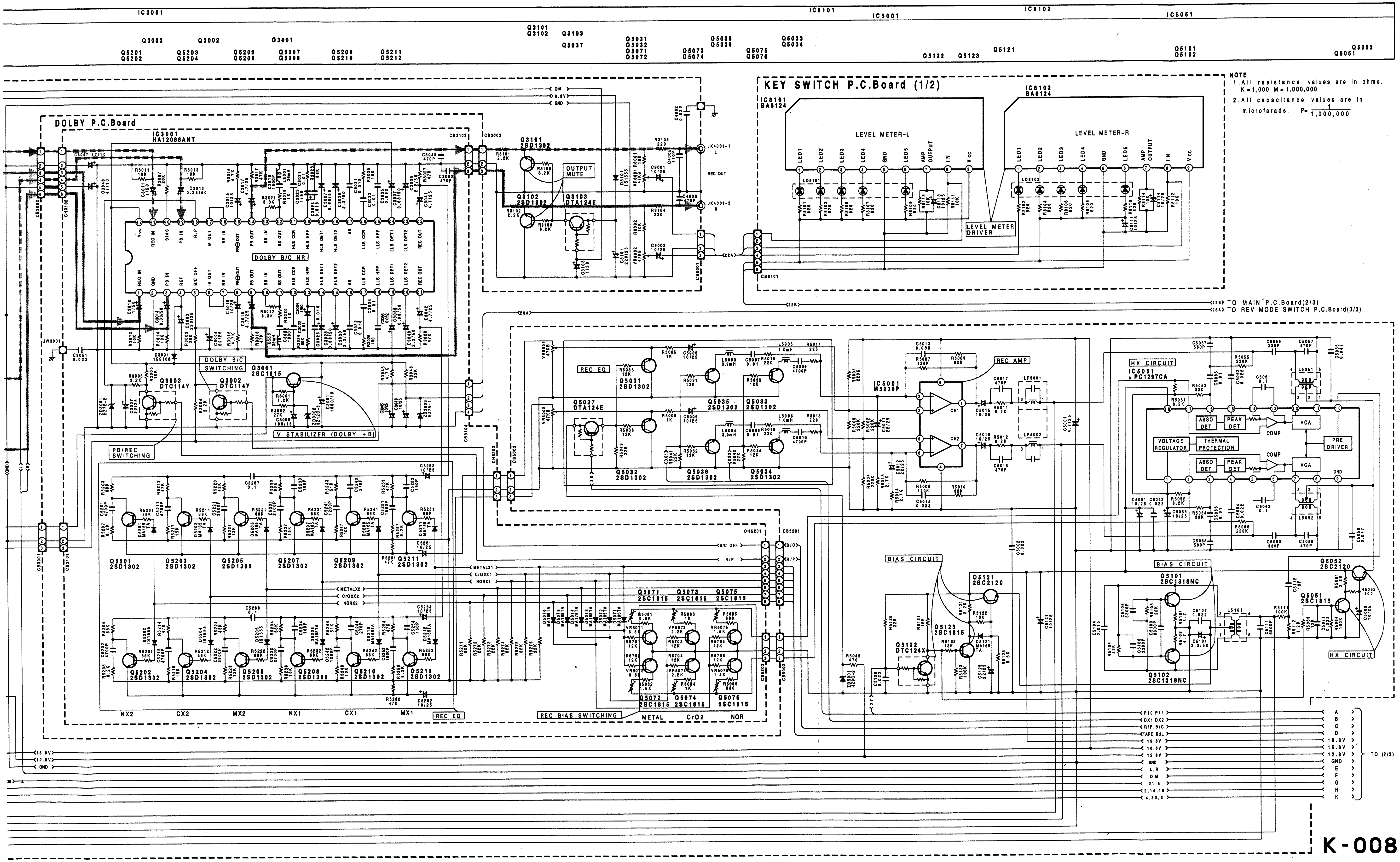

Q2001~2004
PLAY EQ AMP
PLAY BACK HEAD
(A-DECK HD41)
70μs EQ
DUB×2 70μs EQ
Q2011, 2012
DUB ×1, ×2, EQ
Q2111~2113
REC SWITCHING
Q6014
BUFFER
Q2101~2104
PLAY BACK AMP
B-DECK
REC/PLAY HAED
(HD51-1)
IC5001
REC AMP
Q5201~5212
Q5031~5037
REC EQ
REC MUTE
Q2109, 2110
Q2115, 2116
Q2121~2124
Q2117, 2118
PB SWITCHING
BUFFER
Q6014
IC5051
Q5051, 5052
HX CIRCUIT
Q5071~5076
REC BIAS CONTROL
BUFFER
Q5013, 6025
ERASE HAED
(HD51-2)
BIAS CIRCUIT
Q5101, 5102
Q5121~5123
A-DECK
REEL SENSOR
(SE41)
Q6062
REEL TURNING DETECTOR
IC6071
REEL MOTOR DRIVER
REEL MOTOR SPEED CONTROL
Q6075
REEL MOTOR
(M42)
M
TAPE SPEED CONTROL
Q6071, 6073
CAPSTAN MOTOR
(M41)
M
CAPSTAN MOTOR CONTROL
Q6078, 6082
SOLENOID
(SD42)
SOLENOID DRIVER
Q6077, 6081
Q6085, 6087
LEADER TAPE SENSOR
(SE41)
Q6061
READER TAPE DETECTOR
DIR/HALE /CrO₂ DET SW
IC4001
'A'/'B' DECK SELECTOR
DUB SWITCH
IC4002
Q4012
Q4013
A/B SWITCHING
Q4011
DUB ON/OFF SWITCHING
Q6007
Q6009
Q6023
Q6006
BUFFER
Q6004
BUFFER
Q6010
Q6024
BUFFER
BUFFER
IC6101
Q6101, 6102
MUSIC SENSOR
Q6013
Q6025
BUFFER
IC3001
DOLBY B/C NR
B
C
OFF
COM
DOLBY SW
(S6702)
PB/REC SWITCHING
Q3003
DOLBY B/C SWITCHING
Q3002
OUTPUT MUTE
Q3101~3103
Q6008
MUTE DRIVER
LEVEL METER
LEVEL METER DRIVER
IC8101, 8102
LINE AMP
Q4001, 4002
MPX FILTER
Q4007, 4008
Q4009, 4010
LINE MUTE
Q6051~6054
BUS LINE CIRCUIT
IC6001
MICRO COMPUTER
LED DRIVER
Q6027~6033
KEY MATRIX
●DUB X1/X2
●REC MUTE
●REC PAUSE
●POWER
●FAST L/R
●FWD REV
●STOP AB
ON
OFF
TIMER SW
(S6501)
REEL TURNING DETECTOR
Q6064
REEL MOTOR SPEED CONTROL
Q6076
IC6072
REEL MOTOR DRIVER
TAPE SPEED CONTROL
Q6072
Q6074
Q6080
Q6084
CAPSTAN MOTOR DRIVER
Q6079, 6083
Q6086, 6088
SOLENOID DRIVER
READER TAPE DETECTOR
Q6063
REEL SENSOR
(SE51)
M
REEL MOTOR
(M52)
M
CAPSTAN MOTOR
(M51)
SOLENOID
(SD51)
LEADER TAPE SENSOR
(SE52)
DIR/HALE/FWD /REV/CrO₂/METAL DET SW
B-DECK
Q1005~1007
19.8V
REG
16.8V
(For AUDIO)
REG
Q1011
Q1012
12.8V
REG
Q1009
IC1001
5V
(For CPU)
REG
11.7V
(For MOTOR/SOL)
REG
Q1001~1004
A
B
C
D
F1001
(630mA)
F1002
(2A)
POWE


B
C
OFF
COM
DOLBY SW
(S6702)
IC4001
'A'/'B' DECK SELECTOR
IC3001
DOLBY B/C NR
OUTPUT MUTE
Q3101~3103
LEVEL METER
LEVEL METER DRIVER
IC8101, 8102
OUT
JK4001
IN
LINE AMP
Q4001, 4002
MPX FILTER
Q4007, 4008
REC LEVEL BALANCE
DUB SWITCH
IC4002
Q4012
Q4013
A/B SWITCHING
Q4011
DUB ON/OFF SWITCHING
PB/REC SWITCHING
Q3003
DOLBY B/C SWITCHING
Q3002
Q4009, 4010
LINE MUTE
Q6006
BUFFER
Q6004
BUFFER
Q6010
Q6024
BUFFER
Q6007
Q6009
Q6023
BUFFER
IC6101
Q6101, 6102
MUSIC SENSOR
Q6013
Q6025
BUFFER
Q6008
MUTE DRIVER
Q6051~6054
BUS LINE CIRCUIT
BUS LINE
JK6051
C MUTE
Q2109, 2110
Q2115, 2116
UFFER
Q6014
25
IC6001
MICRO COMPUTER
LED DRIVER
Q6027~6033
LED
RELAY
COM
REV MODE SW
(S6701)
KEY MATRIX
•DUB X1/X2
•REC MUTE
•REC PAUSE
•POWER
•FAST L/R
•FWD REV
•STOP AB
ON
OFF
TIMER SW
(S6501)
REEL TURNING DETECTOR
Q6064
REEL MOTOR SPEED CONTROL
Q6076
IC6072
REEL MOTOR DRIVER
TAPE SPEED CONTROL
Q6072
Q6074
Q6080
Q6084
CAPSTAN MOTOR DRIVER
Q6079, 6083
Q6086, 6088
SOLENOID DRIVER
READER TAPE DETECTOR
Q6063
REEL SENSOR
(SE51)
M
REEL MOTOR
(M52)
M
CAPSTAN MOTOR
(M51)
SOLENOID
(SD51)
LEADER TAPE SENSOR
(SE52)
DIR/HALE/FWD /REV/CrO2/METAL DET SW
B-DECK
Q1005~1007
19.8V
REG
16.8V
(For AUDIO)
REG
Q1011
Q1012
12.8V
REG
Q1009
F1001
(630mA)
A
POWER TRANS
(T1001)
VOLTAGE SELECTOR
(S1001)
240V
220V
120V
AC220V/240 50Hz
PLUG AC CORD
(P1001)
B
IC1001
5V
(For CPU)
REG
11.7V
REG
(For MOTOR/SOL)
Q1001~1004
C
F1002
(2A)
D

Schematic Diagram (1/3)

IC'S																	IC4002 IC4001				IC3001	
TRANSISTORS (Q)	Q2121 Q2122	Q2123 Q2124	Q2011 Q2012	Q2111 Q2112	Q2001 Q2002 Q2101 Q2102	Q2003 Q2004 Q2103 Q2104	Q2005 Q2006 Q2105 Q2106	Q4001 Q4002	Q4003 Q4004 Q2007 Q2008 Q2107 Q2108	Q4005 Q2009 Q2010 Q2109 Q2110	Q4006	Q4007 Q4008 Q2015 Q2013	Q2114 Q2117	Q2118	Q2014 Q2016 Q2115 Q2113	Q4009	Q4010 Q2116	Q4012	Q4013 Q4011	Q5201 Q5202	Q3003	Q5203 Q5204	Q3002

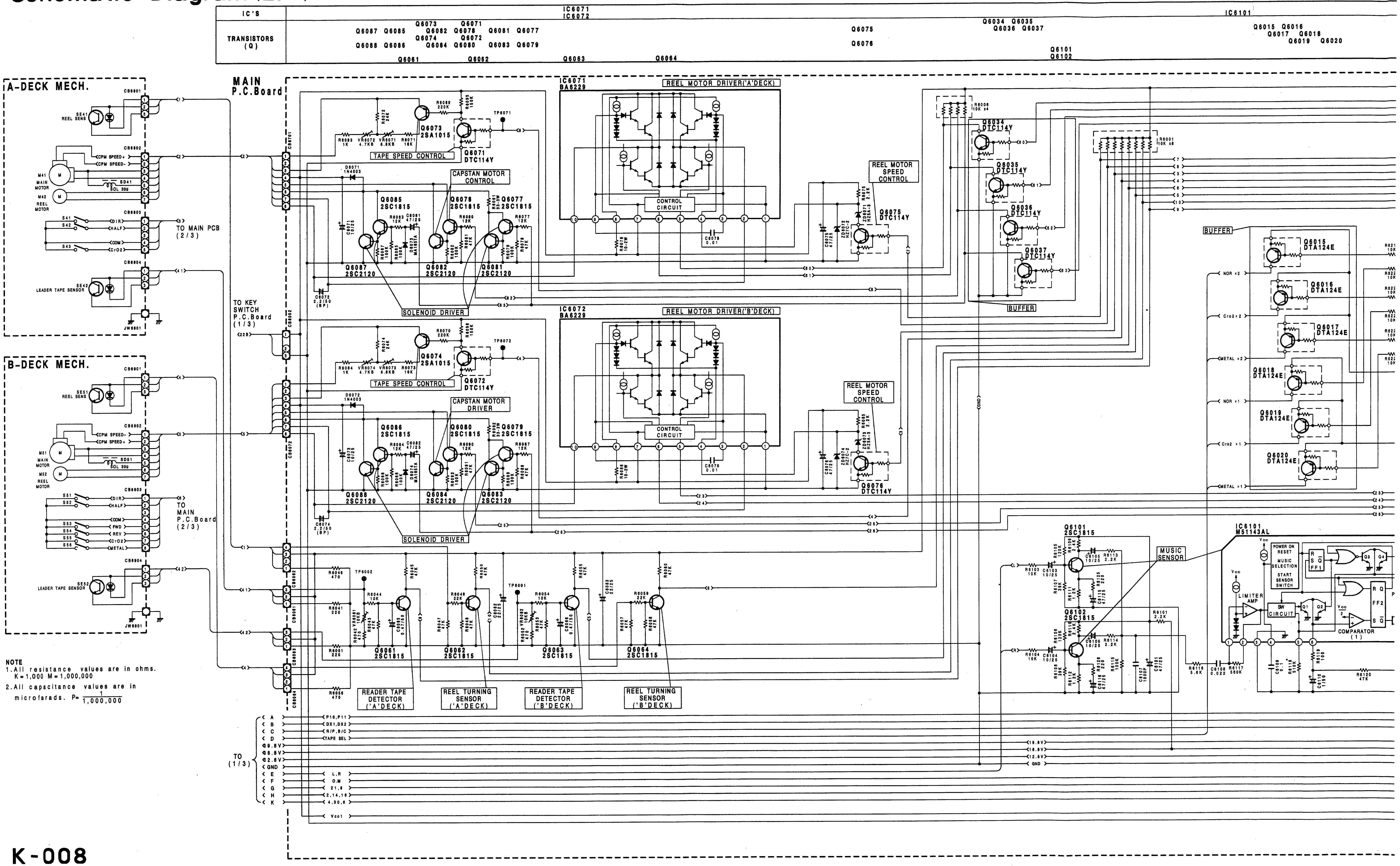

1
2
3
4
5
MAIN P.C.Board
REC VOLUME P.C.Board
VR4101 50K MN
VR4102 50K B
CN4001
CN4101
JW4101
JK4001-3 L-IN
JK4001-4 R-IN
R4001 43K
R4002 43K
C4003 150P
C4004 150P
C4001 0.022
LINE AMP
Q4001 2SC1843
Q4002 2SC1843
Q4003 2SD1302
Q4004 2SD1302
Q4005 DTA124E
Q4006 DTC124X
Q4007 2SC1815
Q4008 2SC1815
LF4001
LF4002
LINE MUTE
MPX FILTER
Q4009 DTA124E
Q4010 DTC124X
IC4002 TC4066BP
IC4001 TC4066BP
DUB SWITCHING
Q4012 DTC124X
Q4013 DTC124X
Q4011 DTC124X
DECK A/B SWITCHING
ZD4001 HZ3A-1
DOLBY P.C.Board
IC3001 HA12088ANT
CN3002
CN3101
CN3001
JW3001
D3001 1SS106
Q3003 DTC114Y
PB/REC SWITCHING
DOLBY SWITCH
Q5201 2SD1302
Q5203 2SD1302
Q5202 2SD1302
Q5204 2SD1302
NX2
CX2
Vcc
REC IN
BIAS
PB IN
R.P.
IA OUT
NR IN
GND
REF
B/C OFF
CN2001
PH (L)
PH (R)
HD41 Play Back Head (A-Deck)
JW2001
Q2011 2SC1815
Q2012 2SC1815
Q2001 2SC1843
Q2003 2SC1843
Q2002 2SC1843
Q2004 2SC1843
DUB x1,x2 EQ
PLAY EQ AMP
Q2005 2SD1302
Q2006 2SD1302
Q2007 2SD1302
Q2008 2SD1302
Q2009 2SD1302
Q2010 2SD1302
70μS EQ
MUSIC SEARCH
DUB x2 70μS EQ
Q2015 DTA124E
Q2014 DTA124E
Q2013 DTA124E
Q2016 DTA124E
D2001 MA165TA
D2002 1S1555
D2003 1S1555
ZD2001 HZ12B1
VR2001 22KB
VR2002 22KB
(16.8V)
(GND)
Erase
Rec/PlayBack (L)
Rec/PlayBack (R)
HD51 Head (B-Deck)
CN2002
TP5005
TP5006
Q2121 2SC1890
Q2123 2SC1890
Q2122 2SC1890
Q2124 2SC1890
D2121 1SS82
D2122 1SS82
Q2111 2SD1302
Q2112 2SD1302
REC SWITCHING
PB SWITCHING
PLAY BACK AMP
Q2101 2SC1843
Q2103 2SC1843
Q2102 2SC1843
Q2104 2SC1843
Q2105 2SD1302
Q2106 2SD1302
Q2107 2SD1302
Q2108 2SD1302
Q2109 2SD1302
Q2110 2SD1302
REC MUTE
VR2101 22KB
VR2102 22KB
Q2114 DTA124E
Q2115 DTA124E
Q2117 2SA921
Q2118 2SC1815
Q2113 2SA1015
Q2116 DTC124X
(12.8V)
CN5111
R5113 2.2
A
B
C
D
E
F
G
H


IC3001
IC8101
IC5001
IC8102
IC5051
DOLBY P.C.Board
IC3001
HA12088ANT
DOLBY B/C NR
DOLBY B/C SWITCHING
V STABILIZER (DOLBY +B)
PB/REC SWITCHING
OUTPUT MUTE
Q3101 2SD1302
Q3102 2SD1302
Q3103 DTA124E
Q3001 2SC1815
Q3002 DTC114Y
Q3003 DTC114Y
JK4001-1 L
JK4001-2 R
REC OUT
KEY SWITCH P.C.Board (1/2)
IC8101 BA6124
IC8102 BA6124
LEVEL METER-L
LEVEL METER-R
LEVEL METER DRIVER
TO MAIN P.C.Board(2/3)
TO REV MODE SWITCH P.C.Board(3/3)
REC EQ
REC AMP
IC5001 M5238P
Q5037 DTA124E
Q5031 2SD1302
Q5032 2SD1302
Q5033 2SD1302
Q5034 2SD1302
Q5035 2SD1302
Q5036 2SD1302
HX CIRCUIT
IC5051 μPC1297CA
ABSO DET
PEAK DET
THERMAL PROTECTION
VOLTAGE REGULATOR
VCA
COMP
PRE DRIVER
BIAS CIRCUIT
Q5121 2SC2120
Q5122 DTC124X
Q5123 2SC1815
Q5101 2SC1318NC
Q5102 2SC1318NC
Q5051 2SC1815
Q5052 2SC2120
REC BIAS SWITCHING
Q5071 2SC1815
Q5072 2SC1815
Q5073 2SC1815
Q5074 2SC1815
Q5075 2SC1815
Q5076 2SC1815
METAL
CrO2
NOR
NX2
CX2
MX2
NX1
CX1
MX1
B/C OFF
R/P
METALX1
CrO2X1
NORX1
METALX2
CrO2X2
NORX2
P10,P11
CX1,CX2
R/P,B/C
TAPE SUL
19.8V
16.8V
12.8V
GND
L,R
OM
21.8
2,14,16
4,30,6
TO (2/3)

NOTE
1. All resistance values are in ohms. K=1,000 M=1,000,000
2. All capacitance values are in microfarads. P= 1/1,000,000

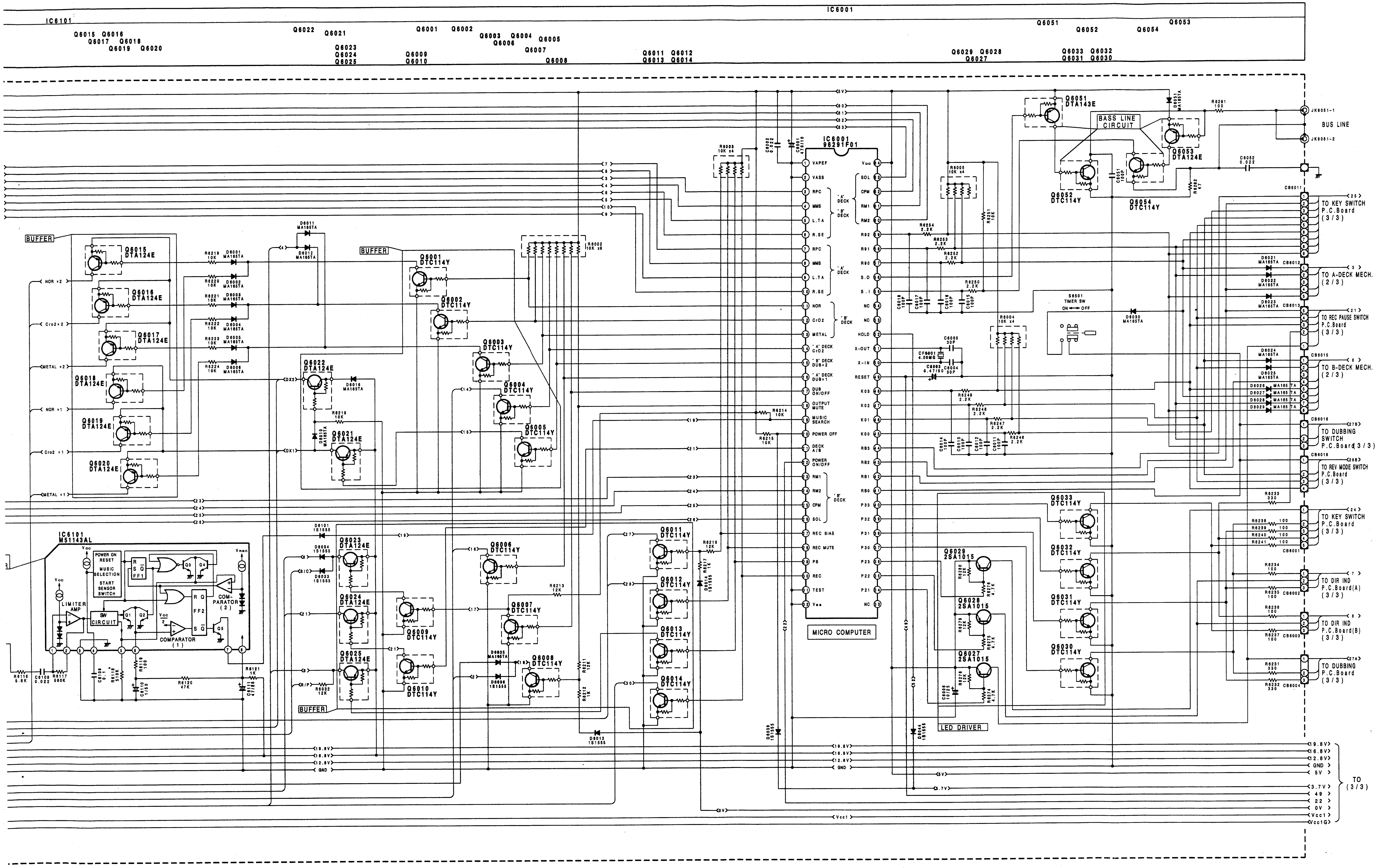
K-008

Schematic Diagram (2/3)


IC'S
TRANSISTORS (Q)
IC6071 IC6072
IC6101
Q6087 Q6085 Q6073 Q6082 Q6071 Q6078 Q6081 Q6077
Q6088 Q6086 Q6074 Q6084 Q6072 Q6080 Q6083 Q6079
Q6061 Q6062 Q6063 Q6064
Q6075 Q6076
Q6034 Q6035 Q6036 Q6037
Q6101 Q6102
Q6015 Q6016 Q6017 Q6018 Q6019 Q6020
A-DECK MECH.
B-DECK MECH.
MAIN P.C.Board
REEL SENS
MAIN MOTOR
REEL MOTOR
LEADER TAPE SENSOR
TO MAIN PCB (2/3)
TO KEY SWITCH P.C.Board (1/3)
TO MAIN P.C.Board (2/3)
IC6071 BA6229
REEL MOTOR DRIVER('A'DECK)
IC6072 BA6229
REEL MOTOR DRIVER('B'DECK)
CONTROL CIRCUIT
TAPE SPEED CONTROL
CAPSTAN MOTOR CONTROL
CAPSTAN MOTOR DRIVER
SOLENOID DRIVER
REEL MOTOR SPEED CONTROL
BUFFER
IC6101 M51143AL
MUSIC SENSOR
LIMITER AMP
SW CIRCUIT
COMPARATOR (1)
POWER ON RESET
MUSIC SELECTION
START SENSOR SWITCH
READER TAPE DETECTOR ('A'DECK)
REEL TURNING SENSOR ('A'DECK)
READER TAPE DETECTOR ('B'DECK)
REEL TURNING SENSOR ('B'DECK)
TO (1/3)
Q6073 2SA1015
Q6071 DTC114Y
Q6074 2SA1015
Q6072 DTC114Y
Q6085 2SC1815
Q6078 2SC1815
Q6077 2SC1815
Q6087 2SC2120
Q6082 2SC2120
Q6081 2SC2120
Q6086 2SC1815
Q6080 2SC1815
Q6079 2SC1815
Q6088 2SC2120
Q6084 2SC2120
Q6083 2SC2120
Q6075 DTC114Y
Q6076 DTC114Y
Q6034 DTC114Y
Q6035 DTC114Y
Q6036 DTC114Y
Q6037 DTC114Y
Q6015 DTA124E
Q6016 DTA124E
Q6017 DTA124E
Q6018 DTA124E
Q6019 DTA124E
Q6020 DTA124E
Q6061 2SC1815
Q6062 2SC1815
Q6063 2SC1815
Q6064 2SC1815
Q6101 2SC1815
Q6102 2SC1815
TP6071
TP6072
TP6001
TP6002
P10,P11
DX1,DX2
R/P,B/C
TAPE SEL
9.8V
6.8V
2.8V
GND
L,R
O.M
21,8
2,14,16
4,30,6
Vcc1
NOR x2
Cro2 x2
METAL x2
NOR x1
Cro2 x1
METAL x1

NOTE
1. All resistance values are in ohms. K=1,000 M=1,000,000
2. All capacitance values are in microfarads. P=$\frac{1}{1,000,000}$

K-008


IC6101
IC6001
Q6015 Q6016
Q6017 Q6018
Q6019 Q6020
Q6022 Q6021
Q6023
Q6024
Q6025
Q6001 Q6002
Q6009
Q6010
Q6003 Q6004
Q6006
Q6005
Q6007
Q6008
Q6011 Q6012
Q6013 Q6014
Q6029 Q6028
Q6027
Q6051
Q6052
Q6054
Q6053
Q6033 Q6032
Q6031 Q6030
BUFFER
Q6015 DTA124E
Q6016 DTA124E
Q6017 DTA124E
Q6018 DTA124E
Q6019 DTA124E
Q6020 DTA124E
NOR ×2
Cro2 ×2
METAL ×2
NOR ×1
Cro2 ×1
METAL ×1
Q6022 DTA124E
Q6021 DTA124E
Q6001 DTC114Y
Q6002 DTC114Y
Q6003 DTC114Y
Q6004 DTC114Y
Q6005 DTC114Y
IC6101 M51143AL
POWER ON RESET
MUSIC SELECTION
START SENSOR SWITCH
LIMITER AMP
SW CIRCUIT
FF1
FF2
COMPARATOR (1)
COMPARATOR (2)
Q6023 DTA124E
Q6024 DTA124E
Q6025 DTA124E
Q6009 DTC114Y
Q6010 DTC114Y
Q6006 DTC114Y
Q6007 DTC114Y
Q6008 DTC114Y
Q6011 DTC114Y
Q6012 DTC114Y
Q6013 DTC114Y
Q6014 DTC114Y
IC6001 96291F01
VAPEF
VASS
RPC
MMS
L.TA
R.SE
NOR
CrO2
METAL
'A' DECK
'B' DECK
'A' DECK CrO2
'B' DECK DUB×2
'A' DECK DUB×1
DUB ON/OFF
OUTPUT MUTE
MUSIC SEARCH
POWER OFF
DECK A/B
POWER ON/OFF
RM1
RM2
CPM
SOL
REC BIAS
REC MUTE
PB
REC
TEST
Vss
VDD
HOLD
X-OUT
X-IN
RESET
K03 K02 K01 K00
R83 R82 R81 R80
P33 P32 P31 P30
P23 P22 P21
NC
MICRO COMPUTER
CF6001 4.00MHz
S6501 TIMER SW ON ↔ OFF
Q6051 DTA143E
BASS LINE CIRCUIT
Q6053 DTA124E
Q6052 DTC114Y
Q6054 DTC114Y
JK6051-1
JK6051-2
BUS LINE
Q6029 2SA1015
Q6028 2SA1015
Q6027 2SA1015
LED DRIVER
Q6033 DTC114Y
Q6032 DTC114Y
Q6031 DTC114Y
Q6030 DTC114Y
CB6011
TO KEY SWITCH P.C.Board (3/3)
CB6012
TO A-DECK MECH. (2/3)
CB6013
TO REC PAUSE SWITCH P.C.Board (3/3)
CB6015
TO B-DECK MECH. (2/3)
CB6016
TO DUBBING SWITCH P.C.Board (3/3)
CB6018
TO REV MODE SWITCH P.C.Board (3/3)
CB6001
TO KEY SWITCH P.C.Board (3/3)
CB6002
TO DIR IND P.C.Board(A) (3/3)
CB6003
TO DIR IND P.C.Board(B) (3/3)
CB6004
TO DUBBING P.C.Board (3/3)
19.8V
16.8V
12.8V
GND
5V
3.7V
49
22
0V
Vcc1
Vcc1G
TO (3/3)

H I J K L M N O

Schematic Diagram (3/3)

IC'S	IC1001
TRANSISTORS (Q)	Q1034 Q6026 Q1002 Q1009 Q1011 Q1012 Q1001 Q1005 Q1033 Q1032 Q1031 Q1003 Q1004 Q1006

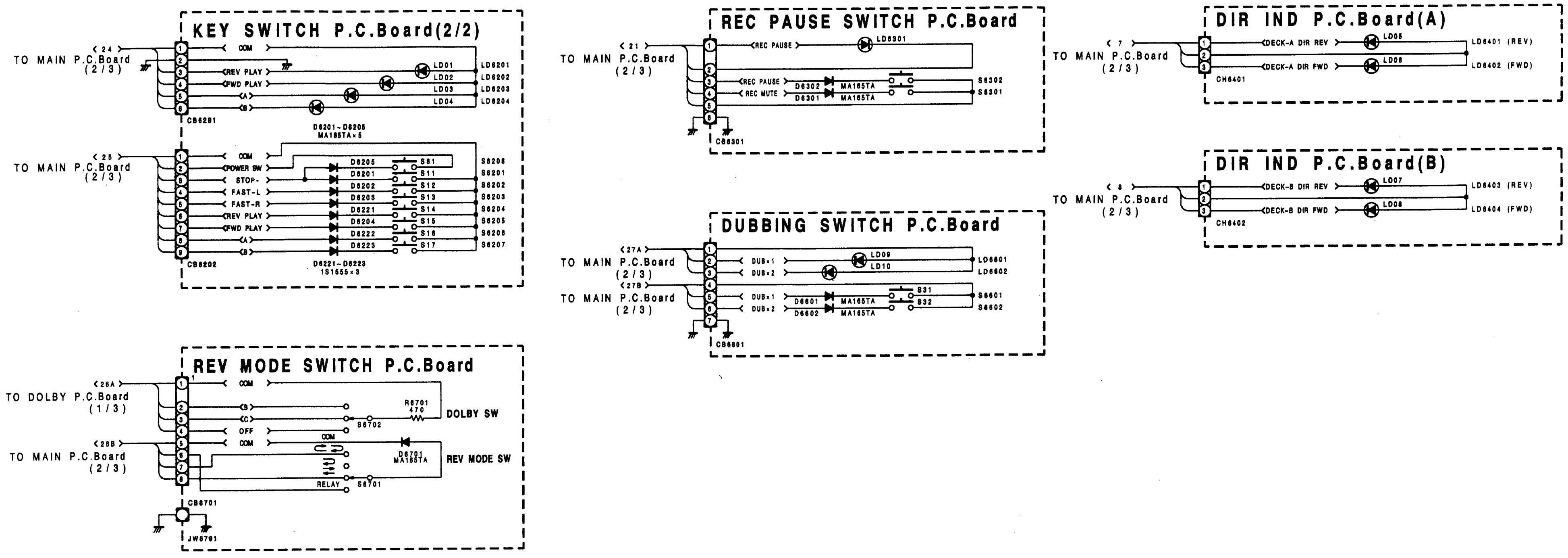
1

2

3

4

5


KEY SWITCH P.C.Board(2/2)
TO MAIN P.C.Board (2/3)
<24>
<25>
COM
REV PLAY
FWD PLAY
A
B
LD01
LD02
LD03
LD04
LD6201
LD6202
LD6203
LD6204
CB6201
D6201~D6205 MA165TA×5
POWER SW
STOP-
FAST-L
FAST-R
D6205
D6201
D6202
D6203
D6221
D6204
D6222
D6223
S81
S11
S12
S13
S14
S15
S16
S17
S6208
S6201
S6202
S6203
S6204
S6205
S6206
S6207
CB6202
D6221~D6223 1S1555×3
REV MODE SWITCH P.C.Board
TO DOLBY P.C.Board (1/3)
<26A>
<26B>
TO MAIN P.C.Board (2/3)
COM
B
C
OFF
COM
R6701 470
S6702
DOLBY SW
D6701 MA165TA
REV MODE SW
RELAY
S6701
CB6701
JW6701
REC PAUSE SWITCH P.C.Board
TO MAIN P.C.Board (2/3)
<21>
REC PAUSE
LD6301
REC MUTE
D6302
D6301
MA165TA
S6302
S6301
CB6301
DUBBING SWITCH P.C.Board
<27A>
<27B>
DUB×1
DUB×2
LD09
LD10
LD6601
LD6602
D6601
D6602
S31
S32
S6601
S6602
CB6601
DIR IND P.C.Board(A)
<7>
DECK-A DIR REV
DECK-A DIR FWD
LD05
LD06
LD6401 (REV)
LD6402 (FWD)
CH6401
DIR IND P.C.Board(B)
<8>
DECK-B DIR REV
DECK-B DIR FWD
LD07
LD08
LD6403 (REV)
LD6404 (FWD)
CH6402

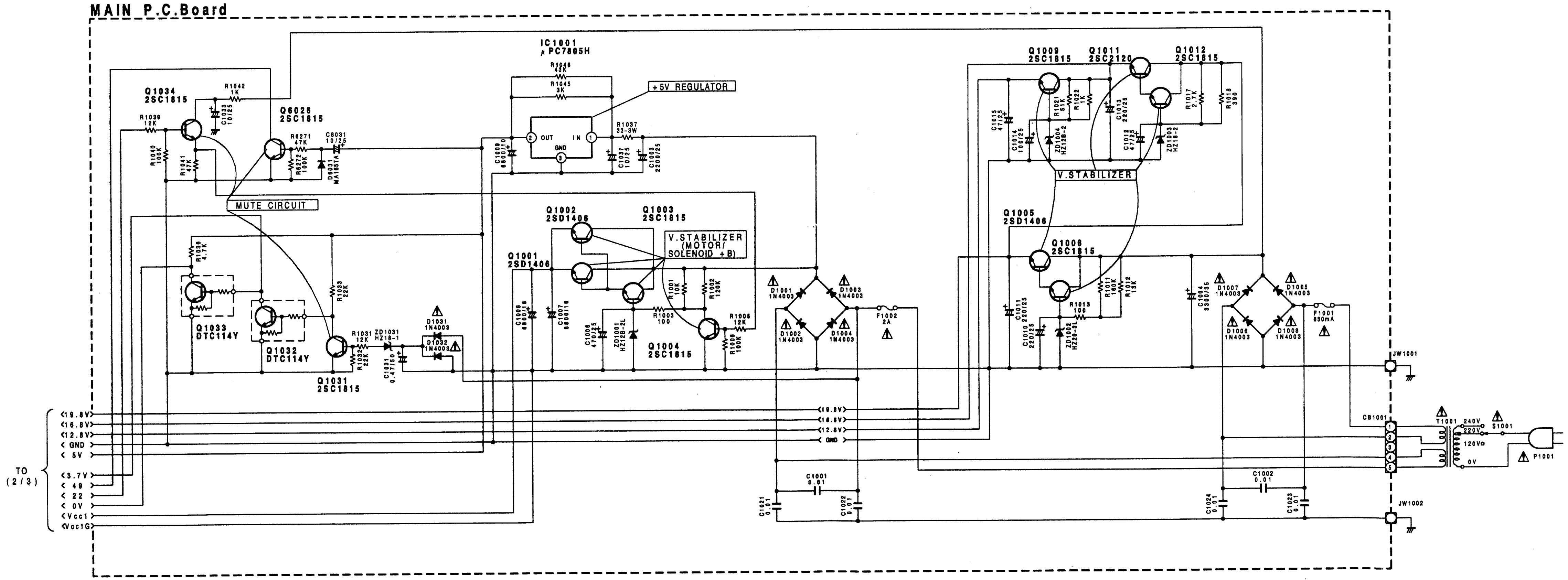
NOTE
1.All resistance values are in ohms. K = 1,000 M = 1,000,000
2.All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Voltage Measuring Conditions

1.Power Supply Voltage :AC220/240V,50Hz
2.Measuring Meter :Digital Multimeter
3.Measuring Point Reference :Between Ground
4.Measuring Condition :No Signal Input
Deck in play conditions

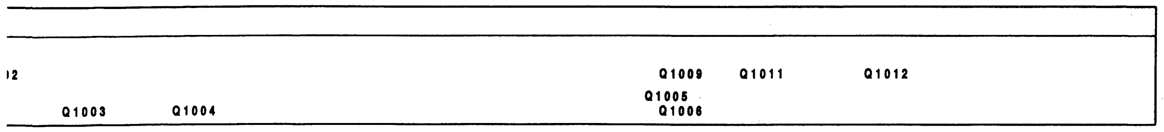
CAUTION;

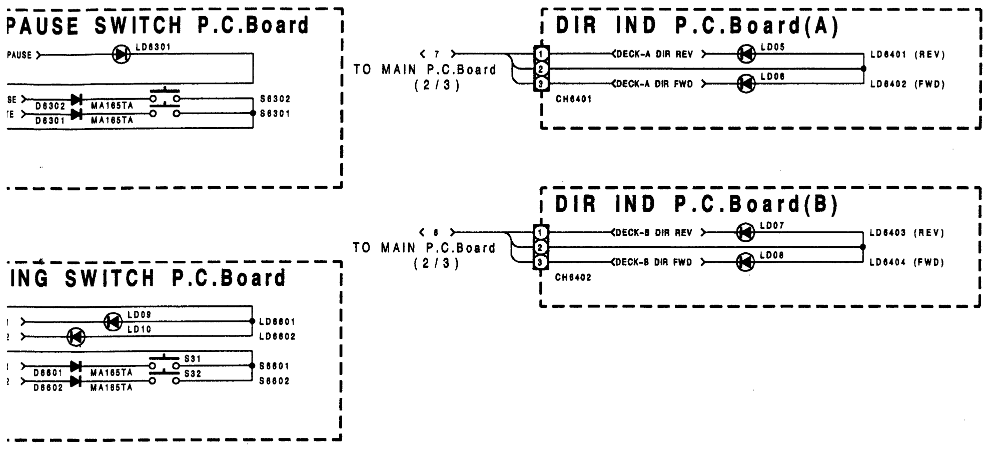
The ⚠mark, the symbol NO. in a box in the schematic diagrm and the shaded area in the parts list designate comdonents which have special characterisics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list


MAIN P.C.Board
Q1034 2SC1815
R1042 1K
C1033 10/25
R1039 12K
R1040 100K
R1041 47K
Q6026 2SC1815
R6271 47K
R6272 100K
C6031 10/25
D6031 MA165TA
MUTE CIRCUIT
R1036 4.7K
Q1033 DTC114Y
Q1032 DTC114Y
R1033 22K
Q1031 2SC1815
R1031 12K
R1032 22K
ZD1031 HZ18-1
C1031 0.47/50
D1031 1N4003
D1032 1N4003
IC1001 μPC7805H
R1046 43K
R1045 3K
+5V REGULATOR
OUT
IN
GND
R1037 33-3W
C1009 6800/10
C1037 10/25
C1003 2200/25
Q1002 2SD1406
Q1003 2SC1815
Q1001 2SD1406
V.STABILIZER (MOTOR/ SOLENOID +B)
C1008 6800/16
C1007 6800/16
C1006 470/25
ZD1001 HZ12B-2L
R1001 10K
R1002 120K
R1003 100
R1005 12K
R1006 100K
Q1004 2SC1815
D1001 1N4003
D1002 1N4003
D1003 1N4003
D1004 1N4003
F1002 2A
C1001 0.01
C1021 0.01
C1022 0.01
Q1009 2SC1815
Q1011 2SC2120
Q1012 2SC1815
C1015 47/25
C1014 100/25
R1021 51K
R1022 1K
ZD1004 HZ12B-2
C1013 220/25
C1012 47/25
ZD1003 HZ18-2
R1017 2.7K
R1018 390
V.STABILIZER
Q1005 2SD1406
Q1006 2SC1815
C1011 220/25
C1010 220/25
ZD1002 HZ20-3L
R1013 100
R1011 160K
R1012 13K
C1004 3300/35
D1007 1N4003
D1005 1N4003
D1006 1N4003
D1008 1N4003
F1001 630mA
C1002 0.01
C1024 0.01
C1023 0.01
JW1001
JW1002
CB1001
T1001
240V
220V
120V
0V
S1001
P1001
TO (2/3)
<19.8V>
<16.8V>
<12.8V>
<GND>
<5V>
<3.7V>
<49>
<22>
<0V>
<Vcc1>
<Vcc1G>

	B	C
Q1001	—	19V
Q1002	—	19V
Q1003	12.8V	19V
Q1004	—	—
Q1005	—	26.7V
Q1006	21V	26.7V
Q1009	12.8V	16.8V
Q1011	—	19.8V
Q1012	18V	19.8V
Q1031	—	0V
Q1032	0V	3.7V
Q1033	3.7V	0V
Q1034	—	26.5V
Q2001	—	1.3V
Q2002	—	—
Q2003	1.3V	8V
Q2004	—	—
Q2005	—	0V
Q2006	—	0V
Q2007	—	0V
Q2008	—	0V
Q2009	—	0V
Q2010	—	0V
Q2011	—	0V
Q2012	—	0V
Q2013	—	12.8V
Q2014	—	DUBx2/CrC METAL 12.8
Q2015	—	CrO2,META 12.8V
Q2016	—	12.8V
Q2101	—	—
Q2102	—	—
Q2103	—	—
Q2104	—	—
Q2105	—	0V
Q2106	—	0V
Q2107	—	0V
Q2108	—	0V
Q2109	—	0V
Q2110	—	0V
Q2111	—	0V
Q2112	—	0V
Q2113	—	—
Q2114	—	CrO2,META 12.8V
Q2115	—	REC 12.8V
Q2116	—	—
Q2117	—	12V
Q2118	—	—
Q2121	—	—
Q2122	—	—
Q2123	—	0V
Q2124	—	0V
Q3001	13.9V	16.8V
Q3002	8.4V	—
Q3003	—	—
Q3101	—	0V
Q3102	—	0V
Q3103	—	—
Q4001	—	10.5V
Q4002	—	—
Q4003	—	0V
Q4004	—	0V
Q4005	—	—
Q4006	STOP 0V DUB 16V	—
Q4007	—	0V
Q4008	—	0V
Q4009	—	—
Q4010	DOLBY SW OFF 0.3V B 9V C 5.3V	—
Q4011	A-DECK PLAY 16.7V B-DECK PLAY 0V	—
Q4012	0V (DUB 16V)	—
Q4013	A-DECK PLAY 16.7V B-DECK PLAY 0V	—
Q5031	—	0V
Q5032	—	0V
Q5033	—	0V
Q5034	—	0V
Q5035	—	0V
Q5036	—	0V
Q5037	—	9.5V
Q5051	—	0V
Q5052	—	19.8V
Q5071	—	—
Q5072	—	—
Q5073	—	—
Q5074	—	—
Q5075	—	—
Q5076	—	—
Q5101	—	13V
Q5102	—	13V
Q5121	—	19.8V
Q5122	—	—
Q5123	—	—
Q5201	—	—
Q5202	—	—
Q5203	—	—
Q5204	—	—
Q5205	—	—
Q5206	—	—
Q5207	—	—
Q5208	—	—
Q5209	—	—
Q5210	—	—
Q5211	—	—
Q5212	—	—
Q6001	0V	—
Q6002	0V	—
Q6003	2.8V	—
Q6004	0V	—
Q6005	2.9V	—
Q6006	2.9V	—

A B C D E F G H

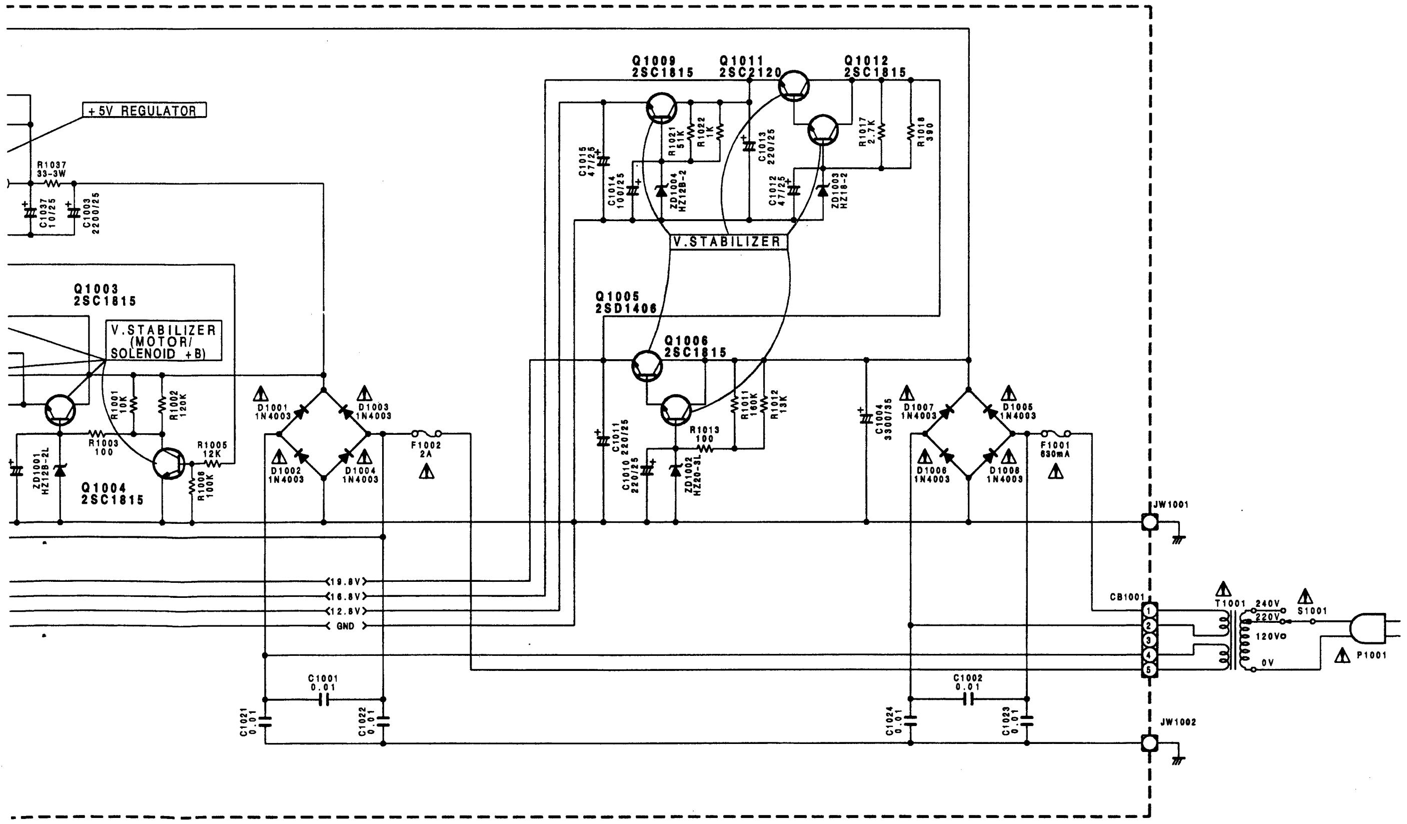

Q1009
Q1011
Q1012
Q1005
Q1006
Q1003
Q1004


PAUSE SWITCH P.C.Board
LD6301
D6302 MA165TA
D6301 MA165TA
S6302
S6301
TO MAIN P.C.Board (2/3)
DIR IND P.C.Board(A)
DECK-A DIR REV
DECK-A DIR FWD
LD05
LD06
LD6401 (REV)
LD6402 (FWD)
CH6401
TO MAIN P.C.Board (2/3)
DIR IND P.C.Board(B)
DECK-B DIR REV
DECK-B DIR FWD
LD07
LD08
LD6403 (REV)
LD6404 (FWD)
CH6402
ING SWITCH P.C.Board
LD09
LD10
LD6601
LD6602
D6601 MA165TA
D6602 MA165TA
S31
S32
S6601
S6602

NOTE
1. All resistance values are in ohms. K = 1,000 M = 1,000,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Voltage Measuring Conditions
1. Power Supply Voltage :AC220/240V,50Hz
2. Measuring Meter :Digital Multimeter
3. Measuring Point Reference :Between Ground
4. Measuring Condition :No Signal Input
Deck in play conditions

CAUTION;
The ⚠ mark, the symbol NO. in a box in the schematic diagrm and the shaded area in the parts list designate comdonents which have special characterisics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list


+5V REGULATOR
R1037 33-3W
C1037 10/25
C1031 2200/25
Q1003 2SC1815
V.STABILIZER (MOTOR/ SOLENOID +B)
R1001
R1003 100
R1002 100K
ZD1001 HZ18-2L
Q1004 2SC1815
R1005 12K
R1006 100K
Q1009 2SC1815
Q1011 2SC2120
Q1012 2SC1815
R1021
R1022
R1017 2.7K
R1018 330
C1015
C1014
ZD1004 HZ18-2
C1012
C1013
ZD1003 HZ18-2
V.STABILIZER
Q1005 2SD1406
Q1006 2SC1815
R1013 100
R1011
R1012 12K
C1011
ZD1002
C1004 3300/25
D1001 1N4003
D1002 1N4003
D1003 1N4003
D1004 1N4003
F1002 2A
D1005 1N4003
D1006 1N4003
D1007 1N4003
D1008 1N4003
F1001 630mA
JW1001
JW1002
CB1001
T1001
240V
220V
120V
0V
S1001
P1001
19.8V
16.8V
12.8V
GND
C1001 0.01
C1002 0.01
C1021 0.01
C1022 0.01
C1023 0.01
C1024 0.01

	B	C	E
Q1001	—	19V	11.7V
Q1002	—	19V	11.7V
Q1003	12.8V	19V	—
Q1004	—	—	0V
Q1005	—	26.7V	19.8V
Q1006	21V	26.7V	—
Q1009	12.8V	16.8V	12.8V
Q1011	—	19.8V	16.8V
Q1012	18V	19.8V	—
Q1031	—	0V	0V
Q1032	0V	3.7V	0V
Q1033	3.7V	0V	0V
Q1034	—	26.5V	POWER OFF 3.7V POWER ON 0V
Q2001	—	1.3V	—
Q2002	—	—	—
Q2003	1.3V	8V	0.7V
Q2004	—	—	—
Q2005	—	0V	—
Q2006	—	0V	—
Q2007	—	0V	—
Q2008	—	0V	—
Q2009	—	0V	—
Q2010	—	0V	—
Q2011	—	0V	—
Q2012	—	0V	—
Q2013	—	12.8V	12.8V
Q2014	—	DUBx2/CrO2 METAL 12.8V	12.8V
Q2015	—	CrO2,METAL 12.8V	12.8V
Q2016	—	12.8V	12.8V
Q2101	—	—	—
Q2102	—	—	—
Q2103	—	—	—
Q2104	—	—	—
Q2105	—	0V	—
Q2106	—	0V	—
Q2107	—	0V	—
Q2108	—	0V	—
Q2109	—	0V	—
Q2110	—	0V	—
Q2111	—	0V	—
Q2112	—	0V	—
Q2113	—	—	12.8V
Q2114	—	CrO2,METAL 12.8V	12.8V
Q2115	—	REC 12.8V	12.8V
Q2116	—	—	0V
Q2117	—	12V	12.8V
Q2118	—	—	0V
Q2121	—	—	—
Q2122	—	—	—
Q2123	—	0V	—
Q2124	—	0V	—
Q3001	13.9V	16.8V	13.2V
Q3002	8.4V	—	0V
Q3003	—	—	0V
Q3101	—	0V	—
Q3102	—	0V	—
Q3103	—	—	—
Q4001	—	10.5V	3V
Q4002	—	—	—
Q4003	—	0V	—
Q4004	—	0V	—
Q4005	—	—	16.8V
Q4006	STOP 0V DUB 16V	—	0V
Q4007	—	0V	—
Q4008	—	0V	—
Q4009	—	—	16.8V
Q4010	DOLBY SW OFF 0.3V B 9V C 5.3V	—	0V
Q4011	A-DECK PLAY 16.7V B-DECK PLAY 0V	—	0V
Q4012	0V (DUB 16V)	—	0V
Q4013	A-DECK PLAY 16.7V B-DECK PLAY 0V	—	0V
Q5031	—	0V	—
Q5032	—	0V	—
Q5033	—	0V	—
Q5034	—	0V	—
Q5035	—	0V	—
Q5036	—	0V	—
Q5037	—	9.5V	9.5V
Q5051	—	0V	0V
Q5052	—	19.8V	REC 18.9V
Q5071	—	—	0V
Q5072	—	—	0V
Q5073	—	—	0V
Q5074	—	—	0V
Q5075	—	—	0V
Q5076	—	—	0V
Q5101	—	13V	—
Q5102	—	13V	—
Q5121	—	19.8V	REC 13V
Q5122	—	—	0V
Q5123	—	—	0V
Q5201	—	—	—
Q5202	—	—	—
Q5203	—	—	—
Q5204	—	—	—
Q5205	—	—	—
Q5206	—	—	—
Q5207	—	—	—
Q5208	—	—	—
Q5209	—	—	—
Q5210	—	—	—
Q5211	—	—	—
Q5212	—	—	—
Q6001	0V	—	0V
Q6002	0V	—	0V
Q6003	2.8V	—	0V
Q6004	0V	—	0V
Q6005	2.9V	—	0V
Q6006	2.9V	—	0V
Q6007	2.9V	—	0V
Q6008	—	—	0V
Q6009	—	—	0V
Q6010	0V	—	0V
Q6011	—	—	0V
Q6012	2.9V	—	0V
Q6013	3V	—	0V
Q6014	2.9V	—	0V
Q6015	—	16.5V	0V
Q6016	—	0V	0V
Q6017	—	0V	0V
Q6018	—	0V	16.8V
Q6019	—	0V	16.8V
Q6020	—	0V	16.8V
Q6021	—	16.8V	16.8V
Q6022	—	0V	—
Q6023	—	—	16.8V
Q6024	—	'A'DECK PLAY 16.7V 'B'DECK PLAY 0V	16.8V
Q6025	—	—	16.8V
Q6026	—	POWER OFF 4.8V POWER ON 0V	0V
Q6027	—	—	5V
Q6028	—	—	5V
Q6029	—	—	5V
Q6030	1.2V	—	0V
Q6031	0V	—	0V
Q6032	0V	—	0V
Q6033	2.4V	—	0V
Q6034	3.75V	—	0V
Q6035	3.9V	—	0V
Q6036	3.7V	0V	0V
Q6037	3.75V	0V	0V
Q6051	5V	—	5V
Q6052	—	—	0V
Q6053	—	—	—
Q6054	—	—	—
Q6061	—	5V	0V
Q6062	—	5V	0V
Q6063	—	5V	0V
Q6064	—	5V	0V
Q6071	2.8V	—	0V
Q6072	2.9V	—	0V
Q6073	—	—	11.72V
Q6074	—	—	11.72V
Q6075	0V	—	0V
Q6076	0V	—	0V
Q6077	—	—	—
Q6078	—	—	—
Q6079	—	—	—
Q6080	—	—	—
Q6081	—	—	0V
Q6082	—	—	.0V
Q6083	—	—	0V
Q6084	—	—	0V
Q6085	—	—	—
Q6086	—	—	—
Q6087	—	—	0V
Q6088	—	—	0V
Q6101	—	—	1.2V
Q6102	—	—	—

IC6001

1	0V	33	—
2	0V	34	3.3V
3	0V	35	3.3V
4	2.9V	36	3.3V
5	5V	37	1.2V
6	5V	38	0V
7	0V	39	0V
8	2.9V	40	2.4V
9	5V	41	4.2V
10	5V	42	4V
11	0V	43	4V
12	0V	44	3.9V
13	2.8V	45	5V
14	0V	46	5V
15	2.9V	47	4.2V
16	2.9V	48	5V
17	2.9V	49	4.9V
18	3.7V	50	2.3V
19	5V	51	2.5V
20	4.2V	52	0V
21	0V	53	0V
22	0V	54	0V
23	0V	55	5V
24	0V	56	5V
25	0V	57	4.2V
26	0V	58	4.2V
27	3.7V	59	4.2V
28	2.9V	60	3.75V
29	3V	61	3.9V
30	2.9V	62	3.7V
31	0V	63	3.75V
32	0V	64	5V

IC3001

1	—	22	—
2	0V	23	—
3	—	24	—
4	—	25	—
5	—	26	—
6	—	27	—
7	—	28	—
8	—	29	—
9	—	30	—
10	—	31	—
11	—	32	—
12	—	33	—
13	—	34	—
14	—	35	—
15	—	36	—
16	—	37	—
17	—	38	—
18	—	39	—
19	—	40	—
20	—	41	—
21	—	42	13.2V

IC5001

1	8.5V
2	8.2V
3	8.2V
4	-0V
5	—
6	—
7	—
8	16.8V

IC6101

1	—
2	—
3	0V
4	—
5	—
6	—
7	—
8	11.8V

IC1001

1	15.7V
2	5V
3	0V

IC5051

1	4.4V
2	2V
3	4.4V
4	0.7V
5	0.15V
6	16.8V
7	0V
8	0V
9	0V
10	—
11	—
12	—
13	—
14	—
15	—
16	—
17	—
18	19.8V

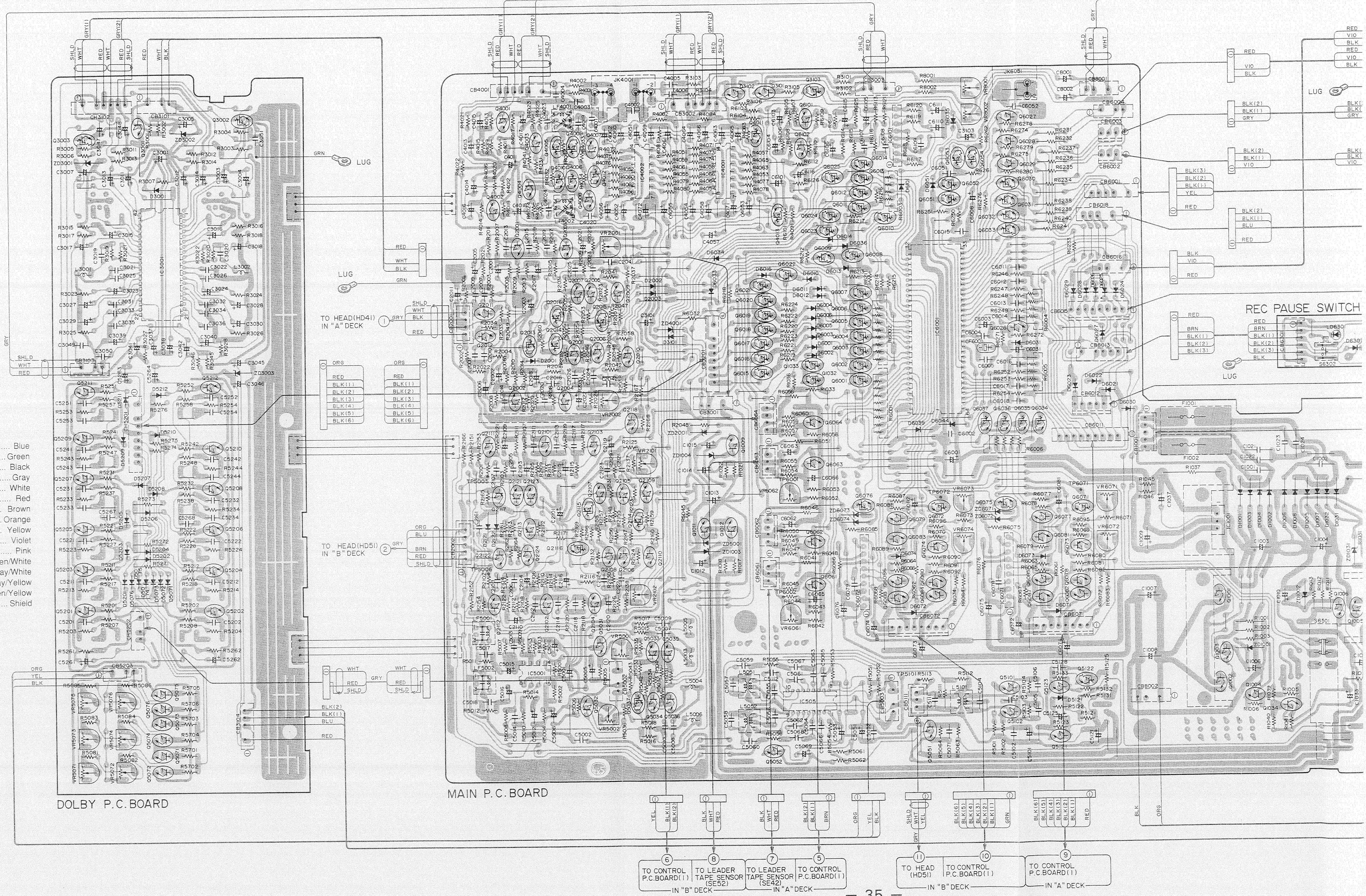
	IC4001	IC4002
1	—	—
2	—	—
3	—	—
4	—	—
5	—	—
6	—	—
7	0V	0V
8	—	—
9	—	—
10	—	—
11	—	—
12	—	—
13	—	—
14	16.8V	16.8V

	IC6071	IC6072
1	0V	0V
2	—	—
3	—	—
4	7.3V	7.3V
5	—	0V
6	—	0V
7	11.7V	11.7V
8	-11.7V	-11.7V
9	—	—
10	—	—

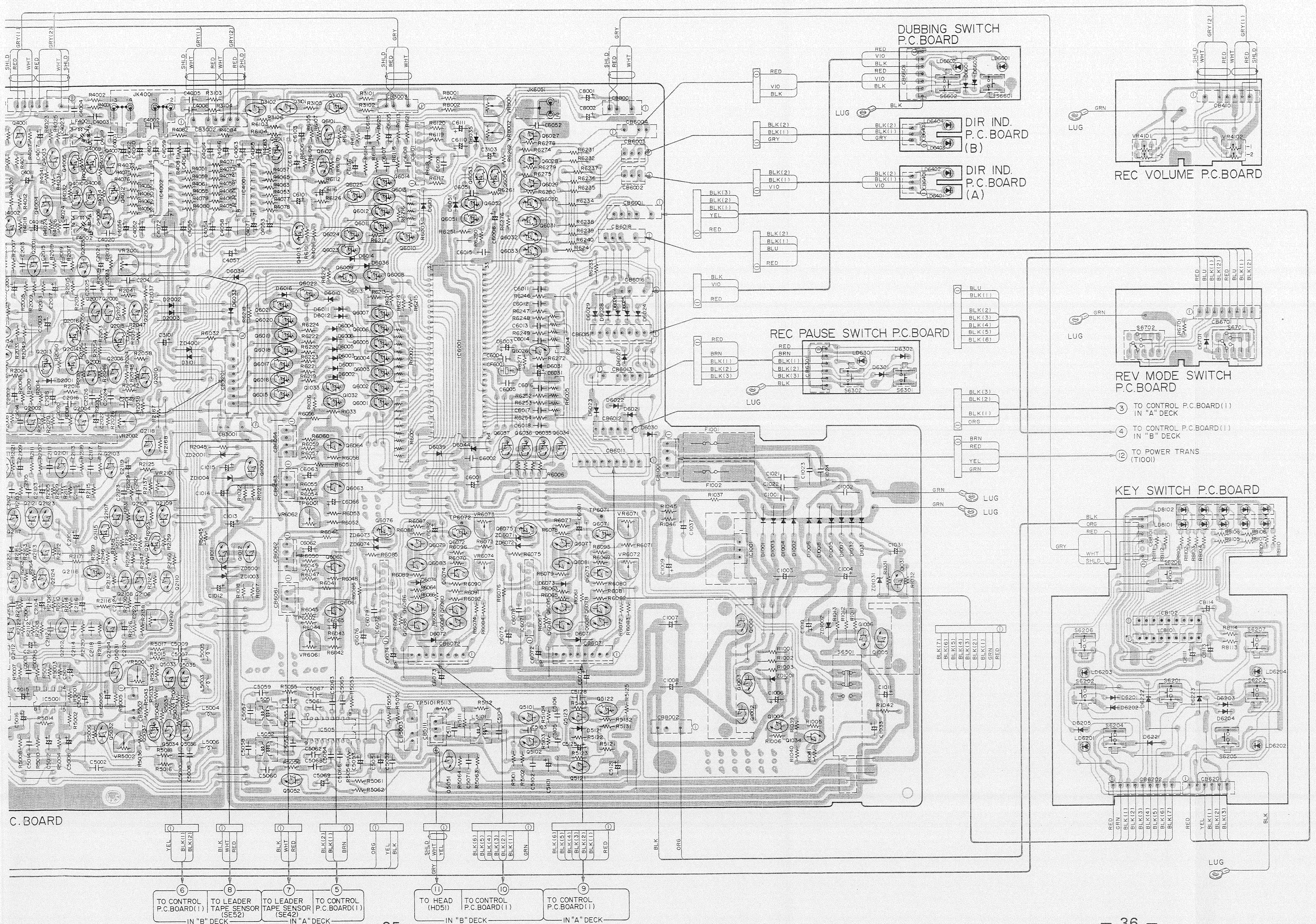
	IC8101	IC8102
1	—	—
2	—	—
3	—	—
4	—	—
5	0V	0V
6	—	—
7	—	—
8	—	—
9	11.7V	11.7V

K-008

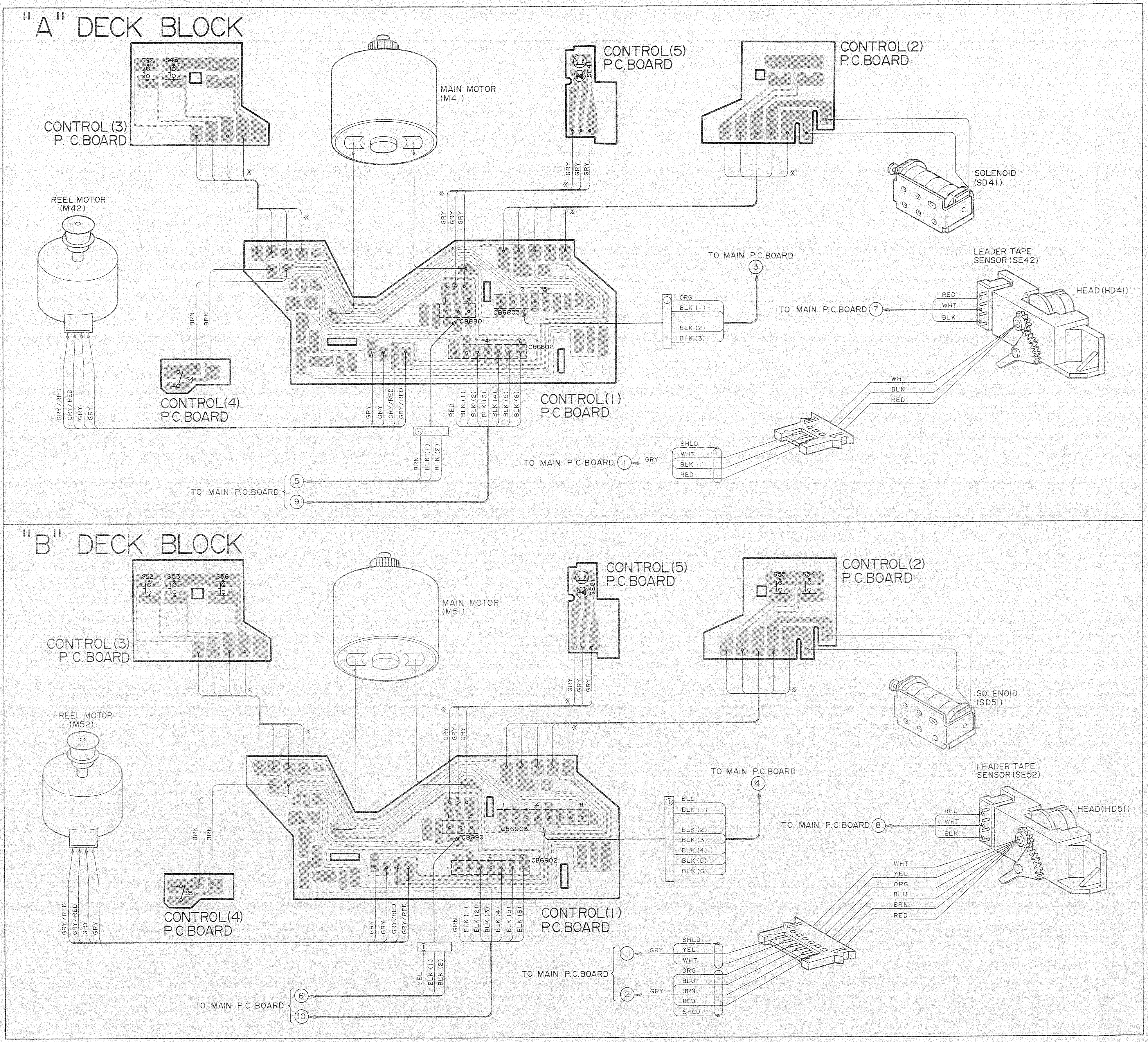
Parts Layout on P.C. Boards and Wiring Diagram (1/2)

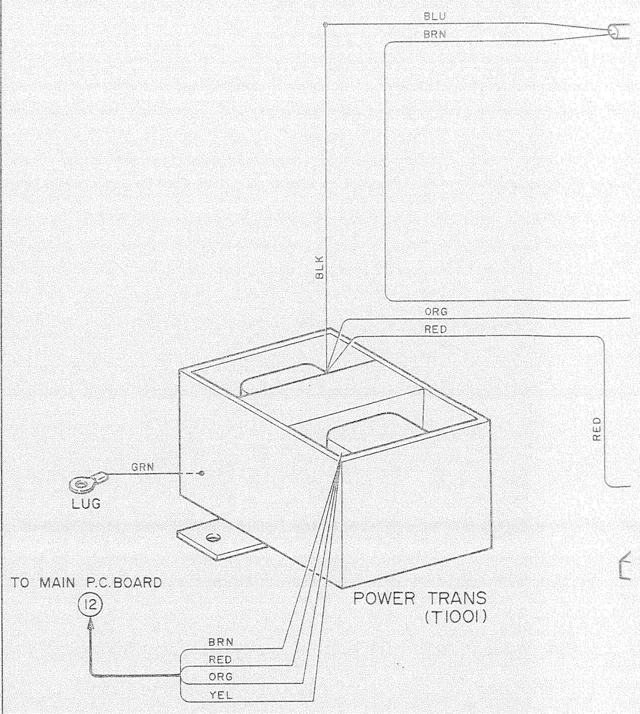

DOLBY P.C.BOARD
MAIN P.C.BOARD
REC PAUSE SWITCH
LUG
TO HEAD(HD41) IN "A" DECK
TO HEAD(HD51) IN "B" DECK
SHLD
WHT
RED
GRY
BLK
BLU
BRN
ORG
GRN
VIO
YEL
BLK(1)
BLK(2)
BLK(3)
BLK(4)
BLK(5)
BLK(6)
IC3001
IC5001
IC6001
IC1001
CB3101
CB4001
CB6001
JK4001
JK6051
F1001
F1002
⑥ TO CONTROL P.C.BOARD(1)
⑧ TO LEADER TAPE SENSOR (SE52)
IN "B" DECK
⑦ TO LEADER TAPE SENSOR (SE42)
⑤ TO CONTROL P.C.BOARD(1)
IN "A" DECK
⑪ TO HEAD (HD51)
⑩ TO CONTROL P.C.BOARD(1)
IN "B" DECK
⑨ TO CONTROL P.C.BOARD(1)
IN "A" DECK
1
2
3
4
5
A
B
C
D
E
F
G
H

BLU	Blue
GRN	Green
BLK	Black
GRY	Gray
WHT	White
RED	Red
BRN	Brown
ORG	Orange
YEL	Yellow
VIO	Violet
PNK	Pink
GRN/WHT	Green/White
GRY/WHT	Gray/White
GRY/YEL	Gray/Yellow
GRN/YEL	Green/Yellow
SHLD	Shield


DUBBING SWITCH P.C.BOARD
DIR IND. P.C.BOARD (B)
DIR IND. P.C.BOARD (A)
REC VOLUME P.C.BOARD
REC PAUSE SWITCH P.C.BOARD
REV MODE SWITCH P.C.BOARD
KEY SWITCH P.C.BOARD
C.BOARD
LUG
IC6001
F1001
F1002
JK4001
JK6051
③ TO CONTROL P.C.BOARD(1) IN "A" DECK
④ TO CONTROL P.C.BOARD(1) IN "B" DECK
⑫ TO POWER TRANS (T1001)
⑥ TO CONTROL P.C.BOARD(1)
⑧ TO LEADER TAPE SENSOR (SE52)
IN "B" DECK
⑦ TO LEADER TAPE SENSOR (SE42)
⑤ TO CONTROL P.C.BOARD(1)
IN "A" DECK
⑪ TO HEAD (HD51)
⑩ TO CONTROL P.C.BOARD(1)
IN "B" DECK
⑨ TO CONTROL P.C.BOARD(1)
IN "A" DECK
D
E
F
G
H
I
J
K
L

Parts Layout on P.C. Boards and Wiring Diagram (2/2)

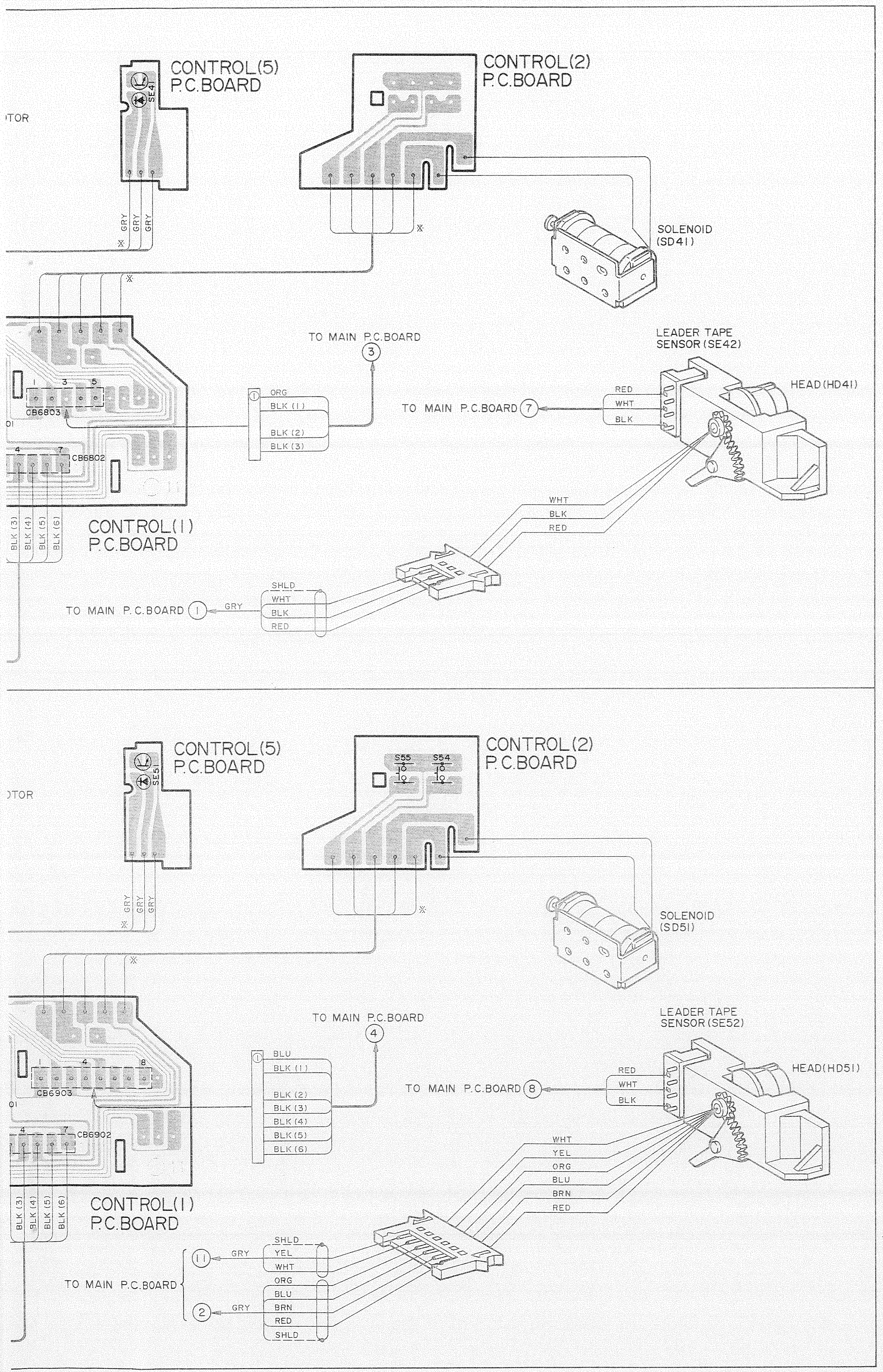

"A" DECK BLOCK
S42
S43
CONTROL (3)
P. C. BOARD
MAIN MOTOR
(M41)
CONTROL(5)
P.C.BOARD
SE41
CONTROL(2)
P.C.BOARD
SOLENOID
(SD41)
REEL MOTOR
(M42)
GRY
BRN
S41
CONTROL(4)
P.C.BOARD
GRY/RED
CB6601
CB6603
CB6602
CONTROL(1)
P.C.BOARD
RED
BLK (1)
BLK (2)
BLK (3)
BLK (4)
BLK (5)
BLK (6)
TO MAIN P.C.BOARD
③
ORG
LEADER TAPE
SENSOR (SE42)
HEAD (HD41)
TO MAIN P.C.BOARD ⑦
WHT
BLK
SHLD
TO MAIN P.C.BOARD ①
TO MAIN P.C.BOARD
⑤
⑨
"B" DECK BLOCK
S52
S53
S56
S55
S54
MAIN MOTOR
(M51)
SE51
SOLENOID
(SD51)
REEL MOTOR
(M52)
S51
CB6901
CB6903
CB6902
BLU
TO MAIN P.C.BOARD
④
LEADER TAPE
SENSOR (SE52)
HEAD (HD51)
TO MAIN P.C.BOARD ⑧
YEL
GRN
TO MAIN P.C.BOARD
⑪
②
⑥
⑩


BLU
BRN
BLK
ORG
RED
GRN
LUG
TO MAIN P.C.BOARD
⑫
POWER TRANS
(T1001)
YEL

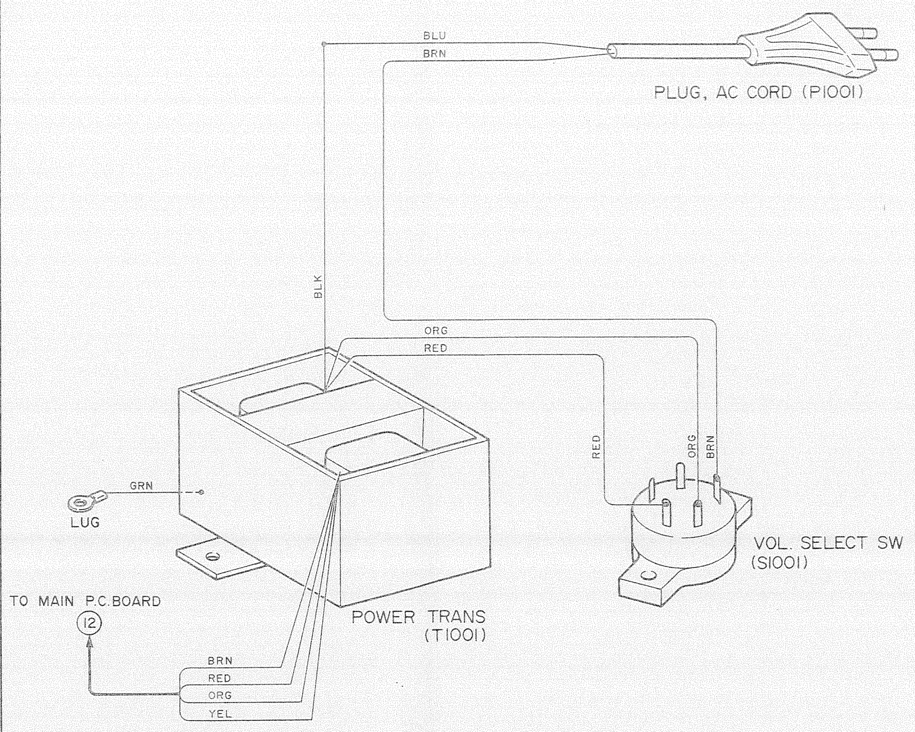
1
2
3
4
5

A B C D E F G H

m (2/2)


CONTROL(5) P.C.BOARD
SE41
CONTROL(2) P.C.BOARD
TOR
GRY
GRY
GRY
※
※
※
SOLENOID (SD41)
CB6803
1
3
5
CB6802
4
7
01
TO MAIN P.C.BOARD ③
ORG
BLK (1)
BLK (2)
BLK (3)
LEADER TAPE SENSOR (SE42)
HEAD (HD41)
TO MAIN P.C.BOARD ⑦
RED
WHT
BLK
WHT
BLK
RED
BLK (3)
BLK (4)
BLK (5)
BLK (6)
CONTROL(1) P.C.BOARD
TO MAIN P.C.BOARD ①
GRY
SHLD
WHT
BLK
RED
CONTROL(5) P.C.BOARD
SE51
CONTROL(2) P.C.BOARD
S55
S54
TOR
GRY
GRY
GRY
※
※
※
SOLENOID (SD51)
CB6903
1
4
8
CB6902
4
7
01
TO MAIN P.C.BOARD ④
BLU
BLK (1)
BLK (2)
BLK (3)
BLK (4)
BLK (5)
BLK (6)
LEADER TAPE SENSOR (SE52)
HEAD (HD51)
TO MAIN P.C.BOARD ⑧
RED
WHT
BLK
WHT
YEL
ORG
BLU
BRN
RED
BLK (3)
BLK (4)
BLK (5)
BLK (6)
CONTROL(1) P.C.BOARD
TO MAIN P.C.BOARD
⑪
GRY
②
GRY
SHLD
YEL
WHT
ORG
BLU
BRN
RED
SHLD

BLU	Blue
GRN	Green
BLK	Black
GRY	Gray
WHT	White
RED	Red
BRN	Brown
ORG	Orange
YEL	Yellow
VIO	Violet
PNK	Pink
GRN/WHT	Green/White
GRY/WHT	Gray/White
GRY/YEL	Gray/Yellow
GRN/YEL	Green/Yellow
SHLD	Shield


BLU
BRN
PLUG, AC CORD (P1001)
BLK
ORG
RED
RED
ORG
BRN
GRN
LUG
VOL. SELECT SW (S1001)
TO MAIN P.C.BOARD ⑫
BRN
RED
ORG
YEL
POWER TRANS (T1001)

Electrical Parts List

Resistor : Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.
Capacitor : μF = microfarads, pF = picofarads

Abbreviations

RES. = Resistor
C.F. = Carbon Film
M.F. = Metal Film
M.O. = Metal Oxide Film
M.P. = Metal Plate
TR. = Transistor
TRANS. = Transformer
CP. = Chip

CAP. = Capacitor
ELY. = Electrolytic
CER. = Ceramic
MYL. = Mylar
TAN. = Tantalum
POLY. = Polystyrol
PP. = Polypropylene
PLT. = Polyethylene

Main P. C. Board

IC's

Symbol No.	Part No.	Description
IC1001	51T50834F02	μPC7805H
IC4001	51T47739F01	TC4066BP
IC4002	51T47739F01	TC4066BP
IC5001	51T80136F01	M5238P
IC5051	51T72929F01	μPC1297CA
IC6001	51T96291F01	96291F01
IC6071	51T70536F01	BA6229
IC6072	51T70536F01	BA6229
IC6101	51T67915F01	M51143AL

Transistors

Symbol No.	Part No.	Description
Q1001	48T58614F01	2SD1406
Q1002	48T58614F01	2SD1406
Q1003	48T81101F01	2SC1815
Q1004	48T81101F02	2SC1815
Q1005	48T58614F01	2SD1406
Q1006	48T81101F01	2SC1815
Q1009	48T81101F01	2SC1815
Q1011	48T43015U01	2SC2120
Q1012	48T81101F01	2SC1815
Q1031	48T81101F02	2SC1815
Q1032	48T81715F12	DTC114Y
Q1033	48T81715F12	DTC114Y
Q1034	48T81101F01	2SC1815
Q2001	48T95079F01	2SC1843
Q2002	48T95079F01	2SC1843
Q2003	48T95079F01	2SC1843
Q2004	48T95079F01	2SC1843
Q2005	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2006	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2007	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2008	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2009	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2010	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2011	48T81101F01	2SC1815
Q2012	48T81101F01	2SC1815
Q2013	48T81715F03	DTA124E
Q2014	48T81715F03	DTA124E
Q2015	48T81715F03	DTA124E
Q2016	48T81715F03	DTA124E
Q2101	48T95079F01	2SC1843
Q2102	48T95079F01	2SC1843
Q2103	48T95079F01	2SC1843
Q2104	48T95079F01	2SC1843
Q2105	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2106	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2107	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2108	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2109	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2110	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2111	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2112	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q2113	48T81102F01	2SA1015
Q2114	48T81715F03	DTA124E
Q2115	48T81715F03	DTA124E
Q2116	48T81715F20	DTC124X
Q2117	48T42941U01	2SA921
Q2118	48T81101F01	2SC1815
Q2121	48S43394P01	2SC1890
Q2122	48S43394P01	2SC1890
Q2123	48S43394P01	2SC1890
Q2124	48S43394P01	2SC1890
Q3101	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q3102	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q3103	48T81715F03	DTA124E
Q4001	48T95079F01	2SC1843
Q4002	48T95079F01	2SC1843

Symbol No.	Part No.	Description
Q4003	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q4004	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q4005	48T81715F03	DTA124E
Q4006	48T81715F20	DTC124X
Q4007	48T81101F01	2SC1815
Q4008	48T81101F01	2SC1815
Q4009	48T81715F03	DTA124E
Q4010	48T81715F20	DTC124X
Q4011	48T81715F20	DTC124X
Q4012	48T81715F20	DTC124X
Q4013	48T81715F20	DTC124X
Q5031	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5032	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5033	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5034	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5035	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5036	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5037	48T81715F03	DTA124E
Q5051	48T81101F01	2SC1815
Q5052	48T43015U01	2SC2120
Q5101	48S40832F03	2SC1318NC
Q1502	48S40832F03	2SC1318NC
Q5121	48T43015U01	2SC2120
Q5122	48T81715F20	DTC124X
Q5123	48T81101F01	2SC1815
Q6001	48T81715F12	DTC114Y
Q6002	48T81715F12	DTC114Y
Q6003	48T81715F12	DTC114Y
Q6004	48T81715F12	DTC114Y
Q6005	48T81715F12	DTC114Y
Q6006	48T81715F12	DTC114Y
Q6007	48T81715F12	DTC114Y
Q6008	48T81715F12	DTC114Y
Q6009	48T81715F12	DTC114Y
Q6010	48T81715F12	DTC114Y
Q6011	48T81715F12	DTC114Y
Q6012	48T81715F12	DTC114Y
Q6013	48T81715F12	DTC114Y
Q6014	48T81715F12	DTC114Y
Q6015	48T81715F03	DTA124E
Q6016	48T81715F03	DTA124E
Q6017	48T81715F03	DTA124E
Q6018	48T81715F03	DTA124E

Symbol No.	Part No.	Description
Q6019	48T81715F03	DTA124E
Q6020	48T81715F03	DTA124E
Q6021	48T81715F03	DTA124E
Q6022	48T81715F03	DTA124E
Q6023	48T81715F03	DTA124E
Q6024	48T81715F03	DTA124E
Q6025	48T81715F03	DTA124E
Q6026	48T81101F02	2SC1815
Q6027	48T81102F01	2SA1015
Q6028	48T81102F01	2SA1015
Q6029	48T81102F01	2SA1015
Q6030	48T81715F12	DTC114Y
Q6031	48T81715F12	DTC114Y
Q6032	48T81715F12	DTC114Y
Q6033	48T81715F12	DTC114Y
Q6034	48T81715F12	DTC114Y
Q6035	48T81715F12	DTC114Y
Q6036	48T81715F12	DTC114Y
Q6037	48T81715F12	DTC114Y
Q6051	48T81715F07	DTA143E
Q6052	48T81715F12	DTC114Y
Q6053	48T81715F03	DTA124E
Q6054	48T81715F12	DTC114Y
Q6061	48T81101F01	2SC1815
Q6062	48T81101F01	2SC1815
Q6063	48T81101F01	2SC1815
Q6064	48T81101F01	2SC1815
Q6071	48T62963F06	DTC114Y
Q6072	48T62963F06	DTC114Y
Q6073	48T81102F01	2SA1015
Q6074	48T81102F01	2SA1015
Q6075	48T81715F12	DTC114Y
Q6076	48T81715F12	DTC114Y
Q6077	48T81101F01	2SC1815
Q6078	48T81101F01	2SC1815
Q6079	48T81101F01	2SC1815
Q6080	48T81101F01	2SC1815
Q6081	48T43015U01	2SC2120
Q6082	48T43015U01	2SC2120
Q6083	48T43015U01	2SC2120
Q6084	48T43015U01	2SC2120
Q6085	48T81101F01	2SC1815
Q6086	48T81101F01	2SC1815
Q6087	48T43015U01	2SC2120
Q6088	48T43015U01	2SC2120
Q6101	48T81101F01	2SC1815
Q6102	48T81101F01	2SC1815

SyMbol No.	Part No.	Description
Diodes		
D1001	48S40477U01	IN4003
D1002	48S40477U01	IN4003
D1003	48S40477U01	IN4003
D1004	48S40477U01	IN4003
D1005	48S40477U01	IN4003
D1006	48S40477U01	IN4003
D1007	48S40477U01	IN4003
D1008	48S40477U01	IN4003
D1031	48S40477U01	IN4003
D1032	48S40477U01	IN4003
D2001	48T44813F01	MA165TA
D2002	48T43189F01	1S1555
D2003	48T43189F01	1S1555
D2121	48T73079F02	1SS82
D2122	48T73079F02	1SS82
D3101	48T43189F01	1S1555
D5121	48T44813F01	MA165TA
D6001	48T44813F01	MA165TA
D6002	48T44813F01	MA165TA
D6003	48T44813F01	MA165TA
D6004	48T44813F01	MA165TA
D6005	48T44813F01	MA165TA
D6006	48T44813F01	MA165TA
D6010	48T44813F01	MA165TA
D6011	48T44813F01	MA165TA
D6012	48T44813F01	MA165TA
D6013	48T43189F01	1S1555
D6014	48T43189F01	1S1555
D6016	48T44813F01	MA165TA
D6021	48T44813F01	MA165TA
D6022	48T44813F01	MA165TA
D6023	48A64813F01	MA165TA
D6024	48T44813F01	MA165TA
D6025	48T44813F01	MA165TA
D6026	48T44813F01	MA165TA
D6027	48T44813F01	MA165TA
D6028	48T44813F01	MA165TA
D6029	48T44813F01	MA165TA
D6030	48T44813F01	MA165TA
D6031	48T44813F01	MA165TA
D6033	48T43189F01	1S1555
D6034	48T43189F01	1S1555
D6035	48T44813F01	MA165TA
D6036	48T43189F01	1S1555
D6039	48T43189F01	1S1555
D6044	48T43189F01	1S1555
D6051	48T44813F01	MA165TA
D6071	48S40477U01	IN4003
D6072	48S40477U01	IN4003
D6073	48T44813F01	MA165TA

SyMbol No.	Part No.	Description	
D6074	48T44813F01	MA165TA	
D6101	48T43189F01	1S1555	
ZD1001	48T52741F41	Zener, HZ12B-2L	
ZD1002	48T52741F57	Zener, HZ20-3L	
ZD1003	48T52739F83	Zener, HZ18-2	
ZD1004	48T52739F74	Zener, HZ12B-2	
ZD1031	48T52739F82	Zener, HZ18-1	
ZD2001	48T52739F73	Zener, HZ12B-1	
ZD4001	48T52739F07	Zener, HZ3A-1	
ZD5001	48T52739F59	Zener, HZ9C-2	
ZD6071	48T52739F27	Zener, HZ5A-3	
ZD6072	48T52739F50	Zener, HZ7C-2	
ZD6073	48T52739F27	Zener, HZ5A-3	
ZD6074	48T52739F50	Zener, HZ7C-2	
Capacitors			
C1001	21T68834F01	CER.,	0.01μF
C1002	21T68834F01	CER.,	0.01μF
C1003	23T00134L47	ELY.,	2200μF / 25V
C1004	23T00134L61	ELY.,	3300μF / 35V
C1006	23T00134L45	ELY.,	470μF / 25V
C1007	23T00135L32	ELY.,	6800μF / 16V
C1008	23T00135L32	ELY.,	6800μF / 16V
C1009	23T00134L25	ELY.,	6800μF / 10V
C1010	23T00149L37	ELY.,	220μF / 25V
C1011	23T00149L37	ELY.,	220μF / 25V
C1012	23T00149L35	ELY.,	47μF / 25V
C1013	23T00149L37	ELY.,	220μF / 25V
C1014	23T00149L36	ELY.,	100μF / 25V
C1015	23T00149L35	ELY.,	47μF / 25V
C1021	21T68834F01	CER.,	0.01μF
C1022	21T68834F01	CER.,	0.01μF
C1023	21T68834F01	CER.,	0.01μF
C1024	21T68834F01	CER.,	0.01μF
C1031	23T00149L51	ELY.,	0.47μF / 50V
C1033	23T00149L32	ELY.,	10μF / 25V
C1037	23T00149L32	ELY.,	10μF / 25V
C2001	23T00149L32	ELY.,	10μF / 25V
C2002	23T00149L32	ELY.,	10μF / 25V
C2003	23T00138L26	ELY.,	4.7μF / 25V
C2005	23T42478F09	ELY.,	4.7μF / 25V
C2006	23T42478F09	ELY.,	4.7μF / 25V
C2007	08S40805F02	CER.,	150pF
C2008	08S40805F02	CER.,	150pF
C2009	08T57705F54	MYL.,	820pF
C2010	08T57705F54	MYL.,	820pF
C2011	23T74436F29	TAN.,	3.3μF / 16V
C2013	08S40805F05	CER.,	470pF

Symbol No.	Part No.	Description
C2014	08S40805F05	CER., 470pF
C2015	08T61940F27	CER., 47pF
C2016	08T61940F27	CER., 47pF
C2017	23T00149L36	ELY., 100μF / 25V
C2018	23T00149L36	ELY., 100μF / 25V
C2019	08T57705F61	MYL., 3300pF
C2020	08T57705F61	MYL., 3300pF
C2021	23T00180L12	ELY., 22μF / 25V
C2022	23T00180L12	ELY., 22μF / 25V
C2023	08T57705F69	MYL., 0.015μF
C2024	08T57705F69	MYL., 0.015μF
C2025	08S65480F61	CER., 0.01μF
C2026	08S65480F61	CER., 0.01μF
C2041	08T57705F66	MYL., 8200pF
C2042	08T57705F66	MYL., 8200pF
C2101	23T00138L26	ELY., 4.7μF / 25V
C2103	23T00149L32	ELY., 10μF / 25V
C2104	23T00149L32	ELY., 10μF / 25V
C2105	08T57705F55	MYL., 1000pF
C2106	08T57705F55	MYL., 1000pF
C2107	08T52714F17	CER., 0.022μF
C2108	08T52714F17	CER., 0.022μF
C2109	23T42478F09	ELY., 4.7μF / 25V
C2110	23T42478F09	ELY., 4.7μF / 25V
C2111	08S40805F05	CER., 470pF
C2112	08S40805F05	CER., 470pF
C2113	08T61940F27	CER., 47pF
C2114	08T61940F27	CER., 47pF
C2115	23T00149L36	ELY., 100μF / 25V
C2116	23T00149L36	ELY., 100μF / 25V
C2117	08T57705F61	MYL., 3300pF
C2118	08T57705F61	MYL., 3300pF
C2119	23T00180L12	ELY., 22μF / 25V
C2120	23T00180L12	ELY., 22μF / 25V
C2121	08T42629F69	MYL., 0.015μF
C2122	08T57705F69	MYL., 0.015μF
C2123	08T57705F67	MYL., 0.01μF
C2124	08T57705F67	MYL., 0.01μF
C2161	08S40805F01	CER., 100pF
C3101	23T00149L37	ELY., 220μF / 25V
C3103	23T00149L52	ELY., 1μF / 50V
C4001	08T52714F17	CER., 0.022μF
C4002	08S52714F17	CER., 0.022μF
C4003	08S40805F02	CER., 150pF
C4004	08S40805F02	CER., 150pF
C4005	08S40805F05	CER., 470pF
C4006	08S40805F05	CER., 470pF
C4011	23T00138L26	ELY., 4.7μF / 25V
C4013	23T00149L32	ELY., 10μF / 25V
C4014	23T00149L32	ELY., 10μF / 25V
C4015	23T00138L26	ELY., 4.7μF / 25V
C4016	23T00138L26	ELY., 4.7μF / 25V

Symbol No.	Part No.	Description
C4017	23T00149L32	ELY., 10μF / 25V
C4018	23T00149L32	ELY., 10μF / 25V
C4019	08T57705F60	MYL., 2700pF
C4020	08T57705F60	MYL., 2700pF
C4023	08T57705F60	MYL., 2700pF
C4024	08T57705F60	MYL., 2700pF
C4051	23T00149L32	ELY., 10μF / 25V
C4052	23T00149L32	ELY., 10μF / 25V
C4053	23T00149L32	ELY., 10μF / 25V
C4054	23T00149L32	ELY., 10μF / 25V
C4055	23T00149L32	ELY., 10μF / 25V
C4056	23T00149L32	ELY., 10μF / 25V
C4057	23T00149L32	ELY., 10μF / 25V
C4058	23T00149L32	ELY., 10μF / 25V
C4059	23T00149L32	ELY., 10μF / 25V
C4060	23T00149L32	ELY., 10μF / 25V
C4061	23T00149L32	ELY., 10μF / 25V
C4062	23T00149L32	ELY., 10μF / 25V
C4063	23T00149L32	ELY., 10μF / 25V
C4064	23T00149L32	ELY., 10μF / 25V
C4065	23T00149L32	ELY., 10μF / 25V
C4066	23T00149L32	ELY., 10μF / 25V
C4071	23T00149L33	ELY., 22μF / 25V
C4072	23T00149L33	ELY., 22μF / 25V
C5001	23T00138L26	ELY., 4.7μF / 25V
C5002	08T52714F17	CER., 0.022μF
C5005	23T00149L32	ELY., 10μF / 25V
C5006	23T00149L32	ELY., 10μF / 25V
C5007	08T57705F67	MYL., 0.01μF
C5008	08T57705F67	MYL., 0.01μF
C5009	08T57705F63	MYL., 4700pF
C5010	08T57705F63	MYL., 4700pF
C5011	23T00149L33	ELY., 22μF / 25V
C5012	23T00149L33	ELY., 22μF / 25V
C5013	08T57705F73	MYL., 0.033μF
C5014	08T57705F73	MYL., 0.033μF
C5015	23T00149L32	ELY., 10μF / 25V
C5016	23T00149L32	ELY., 10μF / 25V
C5017	08T57705F51	MYL., 470pF
C5018	08T57705F51	MYL., 470pF
C5051	23T00149L32	ELY., 10μF / 25V
C5052	08T52714F17	CER., 0.022μF
C5053	23T00149L32	ELY., 10μF / 25V
C5055	08T90316F25	TF., 0.047μF
C5056	08T90316F25	TF., 0.047μF
C5057	08S40805F05	CER., 470pF
C5058	08S40805F05	CER., 470pF
C5059	08S40805F04	CER., 330pF
C5060	08S40805F04	CER., 330PF
C5061	08T90316F29	TF., 0.1μF
C5062	08T90316F29	TF., 0.1μF
C5063	08T57705F71	MYL., 0.022μF

Symbol No.	Part No.	Description
C5064	08T57705F71	MYL., 0.022μF
C5065	08T57705F67	MYL., 0.01μF
C5066	08T57705F67	MYL., 0.01μF
C5067	21S40655F31	CER., 560pF
C5068	21S40655F31	CER., 560pF
C5069	23T00149L32	ELY., 10μF/25V
C5071	08T52714F17	CER., 0.022μF
C5101	23T00138L46	ELY., 2.2μF/50V
C5102	08T52714F17	CER., 0.022μF
C5103	08T52448F33	PP., 6800pF
C5104	08T52448F41	PP., 0.015μF
C5105	08T52448F25	PP., 3300pF
C5106	08T52448F25	PP., 3300pF
C5111	08T52448F33	PP., 6800pF
C5112	21S40655F11	CER., 10pF
C5121	23T74436F41	TAN., 10μF/25V
C5125	23T00149L33	ELY., 22μF/25V
C5128	08T52714F17	CER., 0.022μF
C6001	23T00149L16	ELY., 470μF/10V
C6002	08T52714F17	CER., 0.022μF
C6003	23T00149L51	ELY., 0.47μF/50V
C6004	08T61940F22	CER., 30pF
C6005	08T61940F22	CER., 30pF
C6006	23T00149L32	ELY., 10μF/25V
C6011	08S65480F37	CER., 100pF
C6012	08S65480F37	CER., 100pF
C6013	08S65480F37	CER., 100pF
C6014	08S65480F37	CER., 100pF
C6015	08S65480F37	CER., 100pF
C6016	08S65480F37	CER., 100pF
C6017	08S65480F37	CER., 100pF
C6018	08S65480F37	CER., 100pF
C6031	23T00149L32	ELY., 10μF/25V
C6051	08S65480F37	CER., 100pF
C6052	08S52714F17	CER., 0.022μF
C6062	23T00149L33	ELY., 22μF/25V
C6063	23T00149L33	ELY., 22μF/25V
C6065	23T00149L51	ELY., 0.47μF/50V
C6066	23T00149L51	ELY., 0.47μF/50V
C6071	23T00149L32	ELY., 10μF/25V
C6072	23T00140L37	ELY., (BP.) 2.2μF/50V
C6073	23T00149L32	ELY., 10μF/25V
C6074	23T00140L37	ELY., (BP.) 2.2μF/50V
C6075	23T00149L35	ELY., 47μF/25V
C6076	23T00149L35	ELY., 47μF/25V
C6078	08T52714F13	CER., 0.01μF
C6079	08T52714F13	CER., 0.01μF
C6081	23T00149L35	ELY., 47μF/25V
C6082	23T00149L35	ELY., 47μF/25V
C6101	23T00149L35	ELY., 47μF/25V
C6103	23T00149L32	ELY., 10μF/25V
C6104	23T00149L32	ELY., 10μF/25V

Symbol No.	Part No.	Description
C6105	23T00149L32	ELY., 10μF/25V
C6106	23T00149L32	ELY., 10μF/25V
C6107	08T57705F55	MYL., 1000pF
C6108	08T57705F71	MYL., 0.022μF
C6109	08T90316F29	TF., 0.1μF
C6110	23T00149L52	ELY., 1μF/50V
C6111	23T00149L35	ELY., 47μF/25V
C6115	23T00149L35	ELY., 47μF/25V
C6116	23T00149L35	ELY., 47μF/25V
C8001	23T00149L32	ELY., 10μF/25V
C8002	23T00149L32	ELY., 10μF/25V
Resistors		
R1037	06T92265F13	MF. 33ohm 3W
○ R6001	06S84854F06	Block 10Kohm ×8
△ R6001	06T52333F05	Block 10Kohm ×8
○ R6002	06S84854F06	Block 10Kohm ×8
△ R6002	06T52333F05	Block 10Kohm ×8
○ R6003	06S84854F02	Block 10Kohm ×4
△ R6003	06T52333F02	Block 10Kohm ×4
○ R6004	06S84854F02	Block 10Kohm ×4
△ R6004	06T52333F02	Block 10Kohm ×4
○ R6005	06S84854F02	Block 10Kohm ×4
△ R6005	06T52333F02	Block 10Kohm ×4
○ R6006	06S84854F02	Block 10Kohm ×4
△ R6006	06T52333F02	Block 10Kohm ×4
R6061	06T92265F13	MF. 33ohm 3W
R6062	06T92265F13	MF. 33ohm 3W
R6076	06T92264F01	MF. 10ohm 2W
R6086	06T92264F01	MF. 10ohm 2W
VR2001	18T15356W15	Volume, RH0634C 22Kohm
VR2002	18T15356W15	Volume, RH0634C 22Kohm
VR2101	18T15356W15	Volume, RH0634C 22Kohm
VR2102	18T15356W15	Volume, RH0634C 22Kohm
VR5001	18T15356W17	Volume, RH0634C 47Kohm
VR5002	18T15356W17	Volume, RH0634C 47Kohm
VR6061	18T15356W13	Volume, RH0634C 10Kohm
VR6062	18T15356W13	Volume, RH0634C 10Kohm
VR6071	18T15355W12	Volume, RH064C 6.8Kohm
VR6072	18T15355W11	Volume, RH064C 4.7Kohm
VR6073	18T15355W12	Volume, RH064C 6.8Kohm
VR6074	18T15355W11	Volume, RH064C 4.7Kohm
VR8001	18T15356W17	Volume, RH0634C 47Kohm
VR8002	18T15356W17	Volume, RH0634C 47Kohm

○ : With Safety Regulations Version (AD) △ : Without Safety Regulations Version (EK)

Symbol No.	Part No.	Description

Coils / Filters

L5003	24T81850F08	Inductor 3.9mH
L5004	24T81850F08	Inductor 3.9mH
L5005	24T81850F01	Inductor 1mH
L5006	24T81850F01	Inductor 1mH
L5051	24T72930F01	Coil, HX
L5052	24T72930F01	Coil, HX
L5101	24T70526F02	Coil, OSC
LF4001	24T70527F03	Filter, MPX
LF4002	24T70527F03	Filter, MPX
LF5001	24T70528F01	Filter, Bias
LF5002	24T70528F01	Filter, Bias

Ceramic Filter / Switch

CF6001	91T70534F01	Ceramic Filter 4MHz
S6501	40T15334W01	Switch, Push (TIMER)

Jacks

JK4001	09T15454W03	Plate, Phono 4P (LINE IN / OUT)
JK6051	09T15461W01	Mini., 2P (BUS LINE)

Dolby P. C. Board

IC

IC3001	51T73972F02	HA12088ANT

Transistors

Q3001	48T81101F01	2SC1815
Q3002	48T81715F12	DTC114Y
Q3003	48T81715F12	DTC114Y
Q5071	48T81101F01	2SC1815
Q5072	48T81101F01	2SC1815
Q5073	48T81101F01	2SC1815
Q5074	48T81101F01	2SC1815
Q5075	48T81101F01	2SC1815
Q5076	48T81101F01	2SC1815
Q5201	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5202	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5203	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5204	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5205	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5206	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5207	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5208	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5209	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5210	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5211	48T57305F04	2SD1302
or	48T90183F04	2SD1996
Q5212	48T57305F04	2SD1302
or	48T90183F04	2SD1996

Diodes

D3001	48T15817W01	1SS108
D5071	48T44813F01	MA165TA
D5072	48T44813F01	MA165TA
D5073	48T44813F01	MA165TA
D5074	48T44813F01	MA165TA
D5075	48T44813F01	MA165TA
D5076	48T44813F01	MA165TA
D5201	48T44813F01	MA165TA
D5202	48T44819F01	1S1555
D5203	48T44813F01	MA165TA
D5204	48T43189F01	1S1555
D5205	48T44813F01	MA165TA
D5206	48T43189F01	1S1555
D5207	48T44813F01	MA165TA
D5208	48T44813F01	MA165TA
D5209	48T44813F01	MA165TA
D5210	48T44813F01	MA165TA
D5211	48T44813F01	MA165TA
D5212	48T44813F01	MA165TA
ZD3001	48T52739F47	Zener, HZ7B-2
ZD3002	48T52740F09	Zener, HZ12C-3
ZD3003	48T52739F43	Zener, HZ7A-1

Coils

L3001	24T81850F22	Inductor 36mH
L3002	24T81850F22	Inductor 36mH

Symbol No.	Part No.	Description	
Capacitors			
C3001	23T00181L21	ELY.,	1000μF/16V
C3003	23T00149L37	ELY.,	220μF/25V
C3004	23T00149L33	ELY.,	22μF/25V
C3005	23T00149L25	ELY.,	100μF/16V
C3007	23T00149L33	ELY.,	22μF/25V
C3011	23T42478F24	ELY.,	1μF/50V
C3012	23T42478F24	ELY.,	1μF/50V
C3013	23T42478F21	ELY.,	0.33μF/50V
C3014	23T42478F21	ELY.,	0.33μF/50V
C3015	23T00149L32	ELY.,	10μF/25V
C3016	23T00149L32	ELY.,	10μF/25V
C3017	23T00138L26	ELY.,	4.7μF/25V
C3018	23T00138L26	ELY.,	4.7μF/25V
C3019	08T57705F58	MYL.,	1800pF
C3020	08T57705F58	MYL.,	1800pF
C3021	08T57705F67	MYL.,	0.01μF
C3022	08T57705F67	MYL.,	0.01μF
C3023	23T00149L52	ELY.,	1μF/50V
C3024	23T00149L52	ELY.,	1μF/50V
C3025	08T57705F70	MYL.,	0.018μF
C3026	08T57705F70	MYL.,	0.018μF
C3027	23T42478F23	ELY.,	0.68μF/50V
C3028	23T42478F23	ELY.,	0.68μF/50V
C3029	23T00149L53	ELY.,	2.2μF/50V
C3030	23T00149L53	ELY.,	2.2μF/50V
C3031	08T57705F70	MYL.,	0.018μF
C3032	08T57705F70	MYL.,	0.018μF
C3033	08T57705F67	MYL.,	0.01μF
C3034	08T57705F67	MYL.,	0.01μF
C3035	08T90316F28	TF.,	0.082μF
C3036	08T90316F28	TF.,	0.082μF
C3037	23T42478F23	ELY.,	0.68μF/50V
C3038	23T42478F23	ELY.,	0.68μF/50V
C3039	23T00149L53	ELY.,	2.2μF/50V
C3040	23T00149L53	ELY.,	2.2μF/50V
C3041	23T00138L26	ELY.,	4.7μF/25V
C3042	23T00138L26	ELY.,	4.7μF/25V
C3045	23T00149L32	ELY.,	10μF/25V
C3046	23T00149L32	ELY.,	10μF/25V
C3047	23T00138L11	ELY.,	47μF/10V
C3048	23T00138L11	ELY.,	47μF/10V
C3049	08S40805F05	CER.,	470pF
C3050	08S40805F05	CER.,	470pF
C3051	08T52714F17	CER.,	0.022μF
C5201	08T57705F63	MYL.,	4700pF
C5202	08T57705F63	MYL.,	4700pF
C5211	08T57705F63	MYL.,	4700pF
C5212	08T57705F63	MYL.,	4700pF
C5221	08T57705F62	MYL.,	3900pF
C5222	08T57705F62	MYL.,	3900pF

Symbol No.	Part No.	Description	
C5231	08T57705F60	MYL.,	2700pF
C5232	08T57705F60	MYL.,	2700pF
C5233	08S40805F01	CER.,	100pF
C5234	08S40805F01	CER.,	100pF
C5241	08T57705F56	MYL.,	1200pF
C5242	08T57705F56	MYL.,	1200pF
C5243	21S40655F28	CER.,	270pF
C5244	21S40655F28	CER.,	270pF
C5251	08T57705F57	MYL.,	1500pF
C5252	08T57705F57	MYL.,	1500pF
C5253	08S40805F02	CER.,	150pF
C5254	08S40805F02	CER.,	150pF
C5261	23T00149L32	ELY.,	10μF/25V
C5262	23T00149L32	ELY.,	10μF/25V
C5263	23T00149L32	ELY.,	10μF/25V
C5264	23T00149L32	ELY.,	10μF/25V
C5267	08T57705F79	MYL.,	0.1μF
C5268	23T57705F79	MYL.,	0.1μF
Volume			
VR5071	18T15356W12	RH0634C	6.8Kohm
VR5072	18T15356W12	RH0634C	6.8Kohm
VR5073	18T15356W09	RH0634C	2.2Kohm
VR5074	18T15356W09	RH0634C	2.2Kohm
VR5075	18T15356W08	RH0634C	1.5Kohm
VR5076	18T15356W08	RH0634C	1.5Kohm

Key Switch P. C. Board

IC's		
IC8101	15T51749F01	BA6124
IC8102	51T51749F01	BA6124

Diodes		
D6201	48T44813F01	MA165TA
D6202	48T44813F01	MA165TA
D6203	48T44813F01	MA165TA
D6204	48T44813F01	MA165TA
D6205	48T44813F01	MA165TA
D6221	48T43189F01	1S1555
D6222	48T43189F01	1S1555
D6223	48T43189F01	1S1555

Symbol No.	Part No.	Description
LED's		
LD6201	48T60488F01	SLR-54DU3 (ORG)
LD6202	48T60488F01	SLR-54DU3 (ORG)
LD6203	48T60488F01	SLR-54DU3 (ORG)
LD6204	48T60488F01	SLR-54DU3 (ORG)
LD8101	48T56898F03	SLJ-165DU3HLF (RED)
LD8102	48T56898F03	SLJ-165DU3HLF (RED)
Capacitors		
C8111	23T00149L32	ELY., 10μF / 25V
C8113	23T00149L32	ELY., 10μF / 25V
C8114	23T00149L32	ELY., 10μF / 25V
Switches		
S6201	40T83324F15	Tact, SKHHPM (□)
S6202	40T83324F15	Tact, SKHHPM (◁◁)
S6203	40T83324F15	Tact, SKHHPM (▷▷)
S6204	40T83324F15	Tact, SKHHPM (◁)
S6205	40T83324F15	Tact, SKHHPM (▷)
S6206	40T83324F15	Tact, SKHHPM (A)
S6207	40T83324F15	Tact, SKHHPM (B)
S6208	40T83324F15	Tact, SKHHPM (POWER)
Dubbing Switch P. C. Board		
Diodes / LED's		
D6601	48T44813F01	MA165TA
D6602	48T44813F01	MA165TA
LD6601	48T72160F01	LED, SLR-40VR3F (RED)
LD6602	48T72160F01	LED, SLR-40VR3F (RED)
Switches		
S6601	40T83324F15	Tact, SKHHPM (DUB×1)
S6602	40T83324F15	Tact, SKHHPM (DUB×2)
REC Pause Switch P. C. Board		
Diodes / LED		
D6301	48T44813F01	MA165TA
D6302	48T44813F01	MA165TA
LD6301	48T72160F01	LED, SLR-40VR3F (RED)

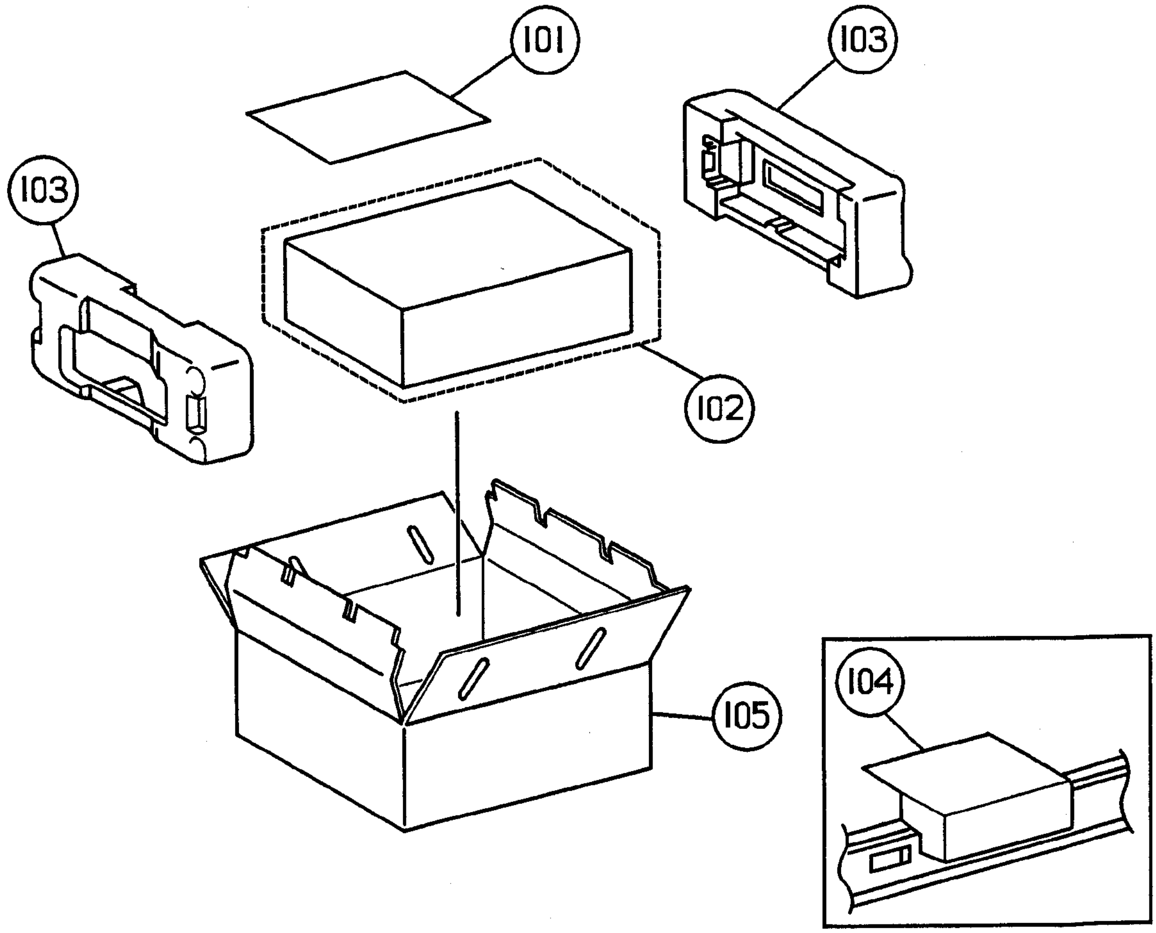
Symbol No.	Part No.	Description
Switches		
S6301	40T83324F15	Tact, SKHHPM (REC MUTE)
S6302	40T83324F15	Tact, SKHHPM (REC PAUSE)
REC Volume P. C. Board		
Volume		
VR4101	18T15339W01	Rotaly, RK097 50KMN (REC BALANCE)
VR4102	18T15338W01	Rotaly, RK097 50KB (REC LEVEL)
REV Mode Switch P. C. Board		
Diode		
D6701	48T44813F01	MA165TA
Switches		
S6701	40T15336W01	Rotaly, SRBM (2 - 4) (REVERSE MODE)
S6702	40T15337W01	Rotaly, SRBM (2 - 3) (DOLBY NR)
Miscellaneous		
F1001	65T42077U14	Fuse, Semko. 630mA
F1002	65T42077U19	Fuse, Semko. 2A
LD6401	48T60485F01	LED, SLR-34MG3 (GRN)
LD6402	48T60485F01	LED, SLR-34MG3 (GRN)
LD6403	48T60485F01	LED, SLR-34MG3 (GRN)
LD6404	48T60485F01	LED, SLR-34MG3 (GRN)
P1001	28T43812P02	Plug, AC Cord
S1001	40T80258F03	SW., Voltage Select
T1001	25T16185W01	Trans, Power

Packing Assembly Parts List

Symbol No.	Part No.	Description
101-1	68P21552W03	Owner's, Manual
101-2	28T15331W02	Plug, Output
101-3	28T15332W02	Cord, Cont
102	56B13156W01	Packing, Sheet
103	56D11359W01	Tray, Packing
104	56B13077W01	Pad, Inner
105	56S10005W85	Carton, Packing

Symbol No.	Part No.	Description

Packing Method View



Cabinet Assembly Parts List

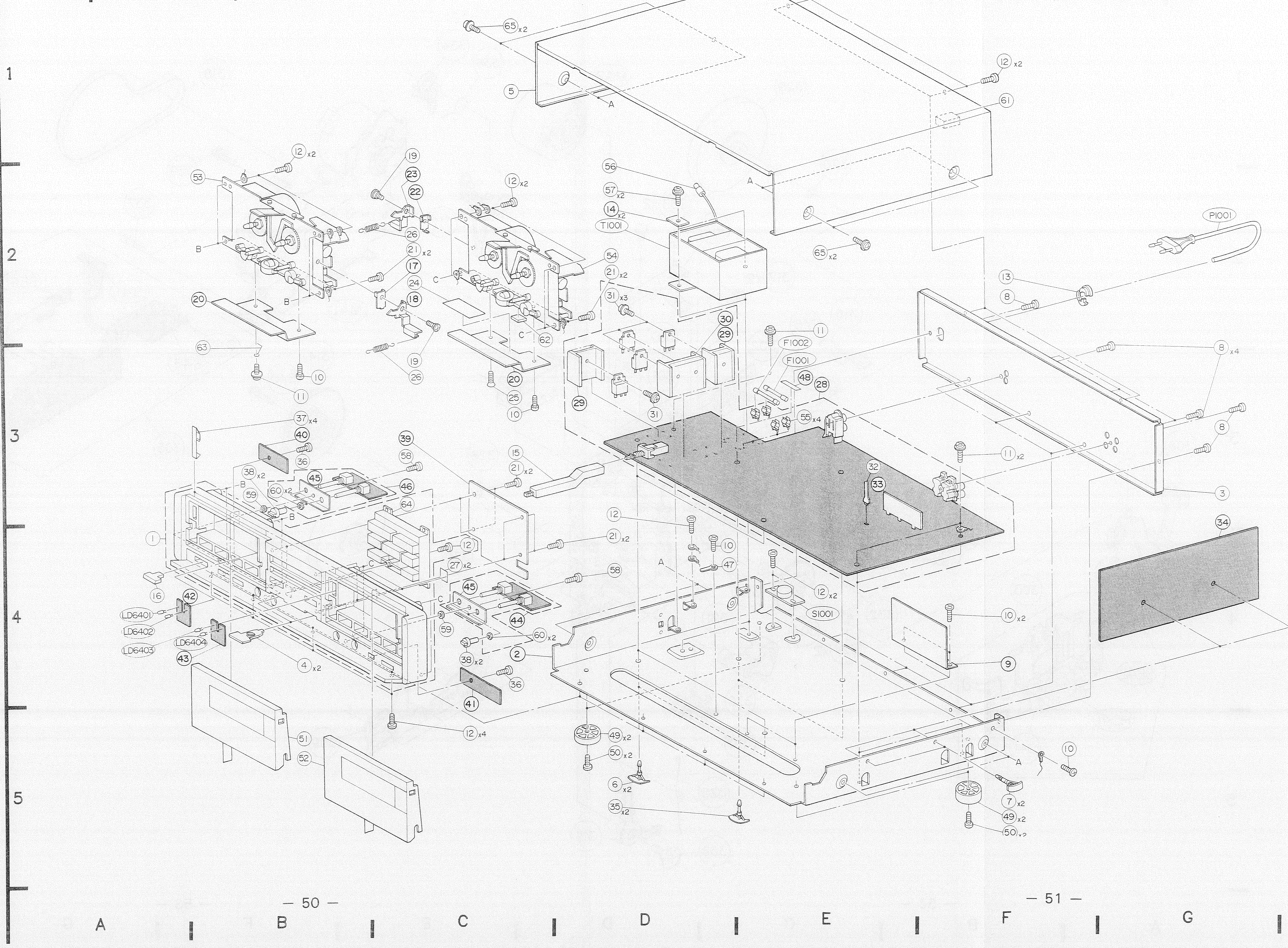
NOTE : The parts without part List are not supplied.

Symbol No.	Index	Part No.	Description
1	4-A	64C21454W01	Assy., Front Panel
△ 3	3-G	15C11356W14	Cover, Rear
○ 3	3-G	15C11356W16	Cover, Rear
4	4-B	36B11370W01	Knob, Eject
5	1-C	15C11357W02	Cover, Top
6	5-D	15T84846F03	LSR-10R
7	5-F	15T84846F01	LSR-6R
8		03A82468F01	Screw, Bind (M3×10)
10		03A44642J03	Screw, Bind (M3×5)
11		03S71677F38	Screw, Flange (M3×6)
12		03S71031F04	Screw, Bind (M3×8)
13	2-F	43B41625J02	Support, Cord
15	3-C	45A11371W01	Lever, SW.
16	4-A	36A11347W01	Knob, Push
19		03T11377W01	Screw, Lever Eject (M3×3.7)
21		03S71031F11	Screw, Bind (M3×10)
24	2-C	14S94461F47	Insulator, Cover CU
25	3-C	03S44205G16	Screw, Countersink (M3×6)
26		41A45559F05	Spring, Eject
27	4-C	14A13052W01	Insulator, Cover
31		03D40121T17	Screw, W/Double Washer (M3×8)
32	3-E	29C41045P06	Lug, Board-In 50mm
35	5-D	07A12980W01	Spacer, P.C.Board
36		03S71031F02	Screw, Bind (M2.6×8)
37	3-B	41T11376W01	Spring, Cassette
38		36A11350W02	Knob, Volume
47	4-D	29C41045P02	Lug, Warp Alound
49		75T11325W01	Trannleg Assy.
50		03S44205G82	Screw, Bind (M4×10)
51	5-B	15B21455W02	Cover, Cassette Assy.
52	5-B	15B21456W01	Cover, Cassette Assy.
53	2-B	81T15108W01	Cassette, Deck FP77E010
54	2-D	81T15109W01	Cassette, Deck FP87E010
55	3-E	09T51410F01	Holder, Fuse
56	2-D	09T47688F01	Connector, Wire Joint
57	2-D	03S40036U01	Screw, W/Washer (M4×8)
58		03S71252F05	Screw, Pan (M3×10)
59		04A66026F04	Washer, Flat (M3.2)
60		02S40000G10	Nut, Hex (M7)
61	1-F	75S92415F11	Cushoin, Rubber
62	2-C	75S62361F43	Cushion, Rubber
63	3-B	41A22359W01	Spring, Holder Shield
64	3-C	36C11384W01	Assy., Knob Logic
65		03S40036U04	Screw, W/Washer (M3×6)

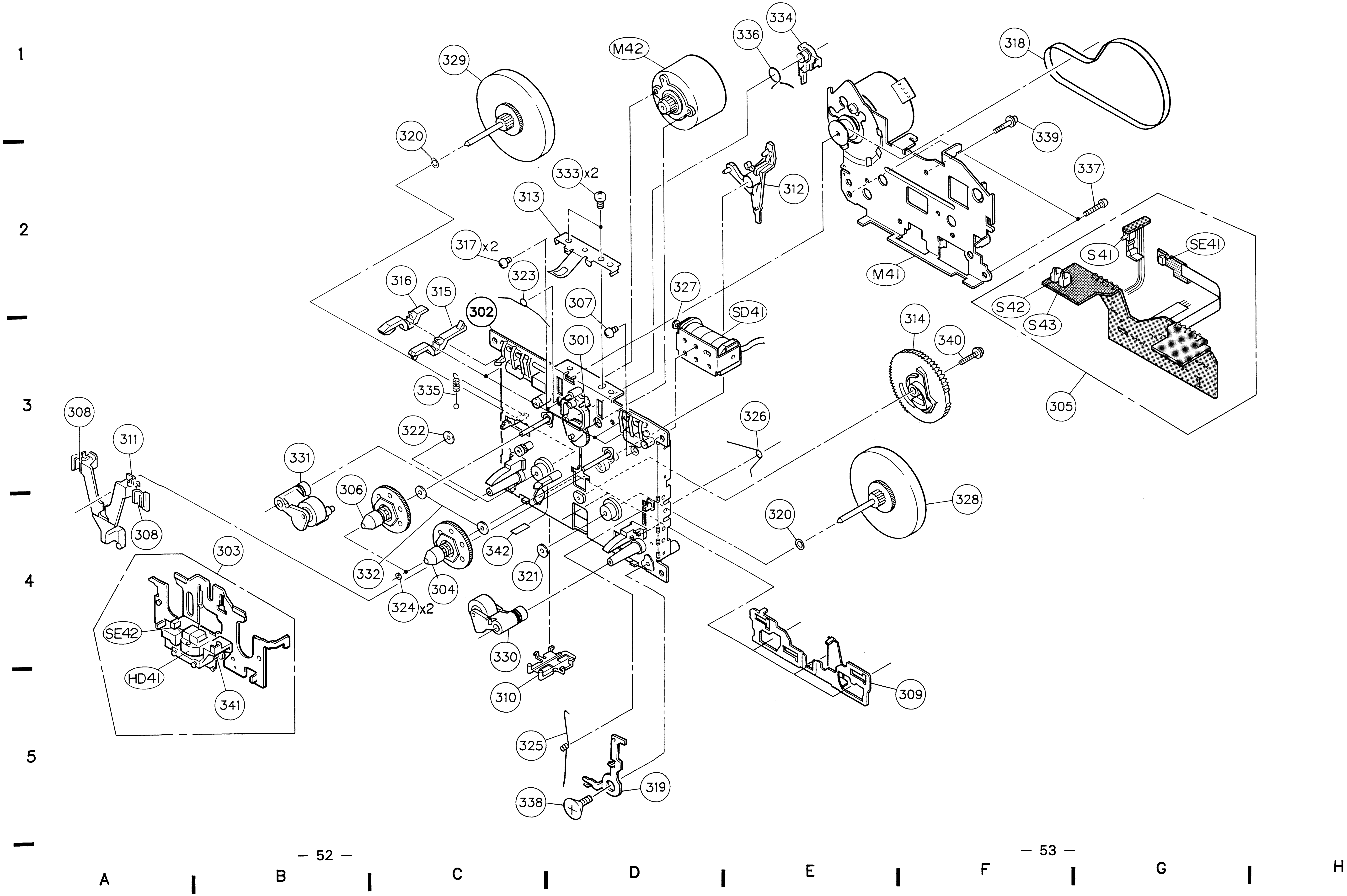
Symbol No.	Index	Part No.	Description

○ : With Safety Regulations Version (AD) △ : Without Safety Regulation Version (EK)

Exploded View (Cabinet)


1
2
3
4
5
A
B
C
D
E
F
G
65 x2
5
A
12 x2
61
53
12 x2
19
23
22
26
21 x2
17
24
18
19
26
12 x2
B
B
C
C
20
63
11
10
62
20
25
10
56
57 x2
14 x2
T1001
54
21 x2
31 x3
30
29
29
31
11
F1002
F1001
48
28
55 x4
65 x2
P1001
13
8
8 x4
8
11 x2
32
33
3
34
37 x4
40
36
39
58
38 x2
45
46
60 x2
59
64
B
15
21 x2
1
12
21 x2
27 x2
58
12
10
47
A
12 x2
S1001
16
42
LD6401
LD6402
LD6403
LD6404
43
45
44
60 x2
59
2
4 x2
38 x2
36
41
10 x2
9
12 x4
51
52
49 x2
50 x2
6 x2
35 x2
10
A
7 x2
49 x2
50 x2

Exploded View (A-Deck)


1
2
3
4
5
A
B
C
D
E
F
G
H
329
320
M42
336
334
318
339
337
333 x2
313
312
317 x2
323
316
315
302
307
301
327
SD41
M41
S41
SE41
S42
S43
314
340
305
335
308
322
326
311
331
306
320
328
308
342
303
332
304
321
324 x2
330
SE42
HD41
341
310
309
325
319
338

Mechanism Assembly Parts List (A - Deck Mech.)

NOTE : The parts without part list are not supplied.

Symbol No.	Index	Part No.	Description
301	3-D	F517-047	Idler Block
303	4-B	F513-469	Plate Head Block
304	4-C	F623-037	Reel Base Block
305	3-F	F567-217	Control P.C.Board Block
306	4-C	F623-127	Reel Base Block
307	3-D	FG114-15	Screw, Pan (M2.6 x 4)
308		FF16N-13	Rubber, Brake
309	5-F	FC47B-15	Plate, Slide
310	5-C	FD31Y-41	Holder, Lead
311	3-A	FD36H-12	Lever, Hold (B)
312	2-E	FD38M-22	Arm, Play (F)
313	2-C	FC40N-32	Spring, Cassette Holder
314	3-F	FD39C-52	Gear, Cam (G)
315	3-C	FD39S-21	Lever, Cr02 Detector
316	3-C	FD38T-12	Lever, PACK Detector
317	2-C	FG114-20	Screw, Pan (M2.6 x 6)
318	1-F	FF16M-11	Belt, Main
319		FC39M-63	Arm, EJECT Prevention (R)
320		FJ111-30	Washer, Polyslider (M2.6)
321	4-C	FJ141-11	Washer, Oil (M2.6)
322	3-C	FJ141-14	Washer, Oil (M2.6)
323	3-C	FK22E-13	Spring, Hold
324	4-C	FJ111-17	Washer, Polyslider (M1.7)
325	5-C	FK22V-15	Spring, EJECT Prevention (R)
326	3-E	FK25T-13	Spring, Slide
327	3-D	PL366-11	Plunger
328	4-F	FR18M-41	Assy., Flywheel
329	1-C	FR19T-21	Assy., Flywheel
330	5-C	FR20L-21	Assy., Pinchroller
331	3-B	FR20M-21	Assy., Pinchroller
332	4-C	UJ12V-11	Washer, Polyslider (M2.1)
333	2-D	KG194-11	Screw, Pan (M3 x 5)
334	1-E	FD35N-12	Arm, Direction
335	3-C	FK22N-12	Spring, Turn
336	1-E	FK25U-13	Spring, Direction
337	2-G	UG12H-14	Screw, Pan (M2.6 x 8)
338	5-C	UG15S-11	Screw, special (M3 x 4)
339		UG17H-11	Screw, W/Washer (M2.6 x 23.5)
340	3-F	UG17L-11	Screw, W/Washer (M2 x 15)
341	5-B	F769-016	Housing, Head Block
342	4-C	UT11R-11	Plate, Reflector

Symbol No.	Index	Part No.	Description
Miscellaneous			
HD41	5-A	FU18L-11	Head
M41	2-F	F525-252	Main Motor Block
M42	1-D	F564-258	Reel Motor Block
S41	2-G	UE16D-12	SW., Leaf (DIR)
S42	3-F	UE16E-11	SW., Push (HALF)
S43	3-F	UE16E-11	SW., Push (Cr02)
SD41	3-E	F756-252	Solenoid Block
SE41	2-G	AZ15S-00	Sensor, Reel
SE42	4-A	AZ13P-00	Sensor, Leader Tape

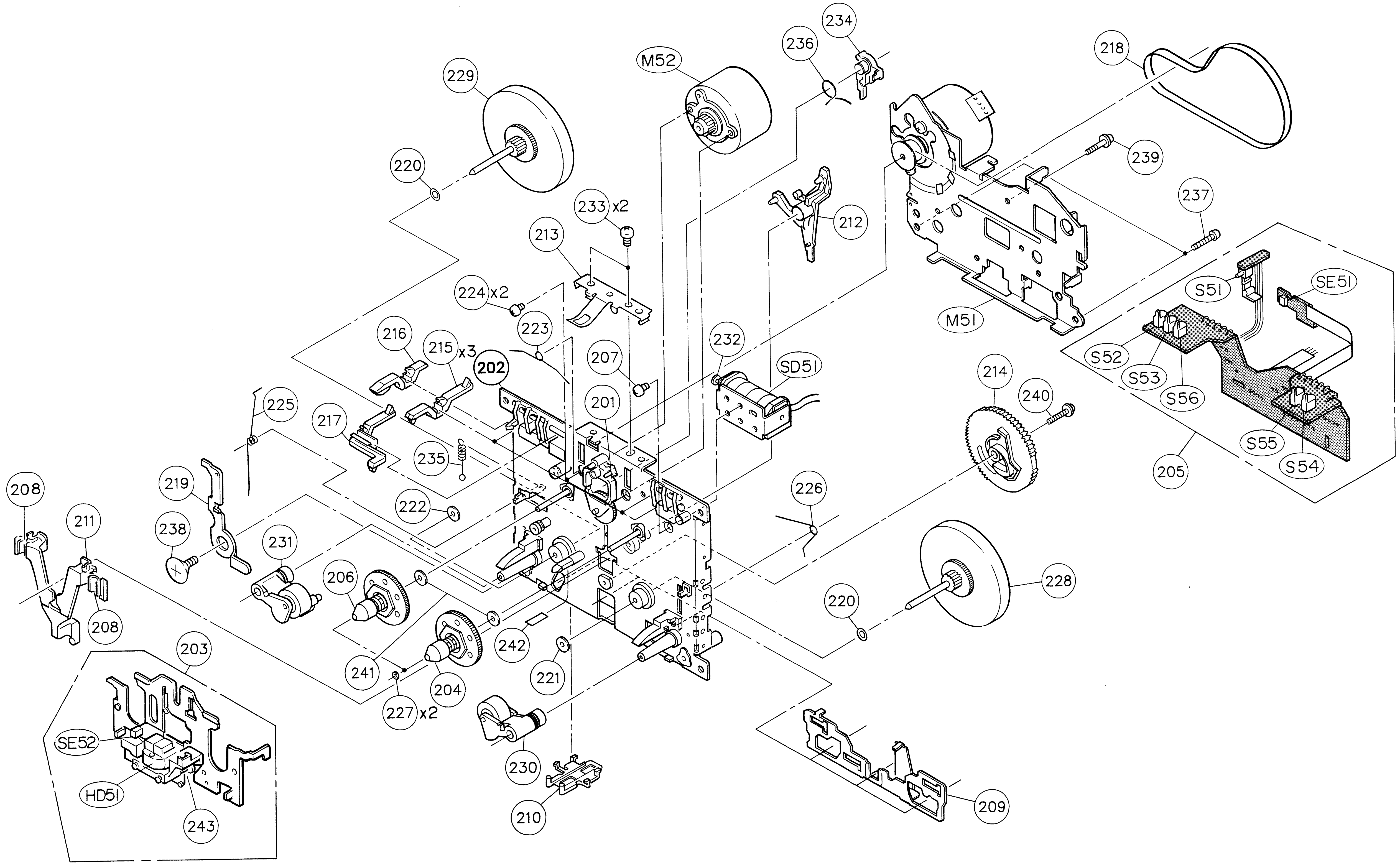
Mechanism Assembly Parts List (B-Deck Mech.)

NOTE : The parts without part list are not supplied.

Symbol No.	Index	Part No.	Description
201	3-D	F517-047	Idler Block
203	4-B	F513-468	Plate Head Block
204	4-C	F623-037	Reel Base Block
205	3-F	F567-217	Control P.C.Board Block
206	4-B	F623-127	Reel Base Block
207	3-D	FG114-15	Screw, Pan (M2.6 x 4)
208		FF16N-13	Rubber, Brake
209	5-E	FC47B-15	Plate, Slide
210	5-C	FD31Y-41	Holder, Lead
211	3-A	FD36H-12	Lever, Hold (B)
212	2-E	FD38M-22	Arm, Play (F)
213	2-C	FC40N-32	Spring, Cassette Holder
214	3-F	FD39C-52	Gear, Cam (G)
215	3-C	FD38S-21	Lever, REC Detector
216	2-C	FD38T-12	Lever, PACK Detector
217	3-B	FD38U-12	Lever, METAL Detector
218	1-F	FF16M-11	Belt, Main
219	3-B	FC39L-63	Arm. EJECT Prevention (L)
220		FJ111-30	Washer, Polyslider (M2.6)
221	4-C	FJ141-11	Washer, Oil (M2.6)
222	3-C	FJ141-14	Washer, Oil (M2.6)
223	2-C	FK22E-13	Spring, Hold
224	2-C	FG114-20	Screw, Pan (M2.6 x 6)
225	3-B	FK22P-16	Spring, EJECT Prevention (L)
226	3-E	FK25T-13	Spring, Slide
227	4-C	FJ111-17	Washer, Polyslider (M1.7)
228	4-F	FR18M-41	Assy., Flywheel
229	1-C	FR19T-21	Assy., Flywheel
230	4-C	FR20L-21	Assy., Pinchroller
231	3-B	FR20M-21	Assy., Pinchroller
232	3-D	PL366-11	Plunger
233	2-D	KG194-11	Screw, Pan (M3 x 5)
234	1-E	FD35N-12	Arm, Direction
235	3-C	FK22N-12	Spring, Turn
236	1-E	FK25U-13	Spring, Direction
237	2-F	UG12H-14	Screw, Pan (M2.6 x 8)
238	3-B	UG15S-11	Screw, Special (M3 x 4)
239	2-F	UG17H-11	Screw, W/Washer (M2.6 x 23.5)
240	3-F	UG17L-11	Screw, W/Washer (M2 x 15)
241	4-B	UJ12V-11	Washer, Polyslider (M2.1)
242	4-C	UT11R-11	Plate, Reflector
243	5-B	F769-016	Housing, Head Block

Symbol No.	Index	Part No.	Description
Miscellaneous			
HD51	5-A	FU18D-11	Head
M51	2-E	F525-252	Main Motor Block
M52	1-D	F564-258	Reel Motor Block
S51	2-F	UE16D-12	SW., Leaf (DIR)
S52	3-F	UE16E-11	SW., Push (HALF)
S53	3-F	UE16E-11	SW., Push (FWD)
S54	3-F	UE16E-11	SW., Push (REV)
S55	3-G	UE16E-11	SW., Push (Cr02)
S56	3-G	UE16E-11	SW., Push (METAL)
SD51	3-E	F765-252	Solenoid Block
SE51	2-G	AZ15S-00	Sensor, Reel
SE52	4-A	AZ13P-00	Sensor, Leader Tape

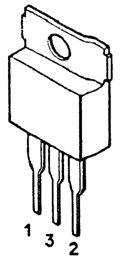
Exploded View (B-Deck)


234
236
M52
218
229
220
239
233 x2
237
212
213
224 x2
SE51
S51
M51
223
216
215 x3
202
232
207
SD51
214
240
S52
S53
S56
225
217
201
235
S55
S54
205
226
208
219
222
211
238
231
206
228
220
208
242
241
221
227 x2
204
203
230
SE52
HD51
210
209
243

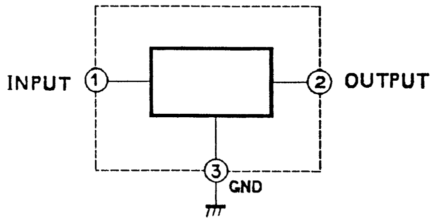
1
2
3
4
5
A
B
C
D
E
F
G

Semi-Conductor Lead Identifications

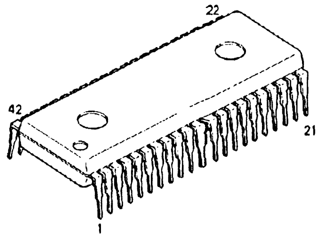
µPC7805H : IC1001

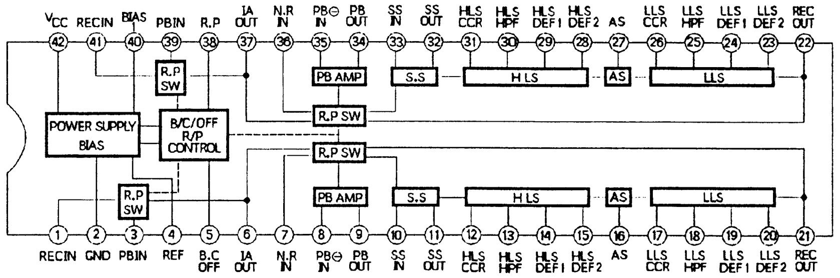


1: INPUT
2: OUTPUT
3: GND

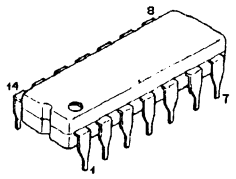

INPUT ①
② OUTPUT
③
GND

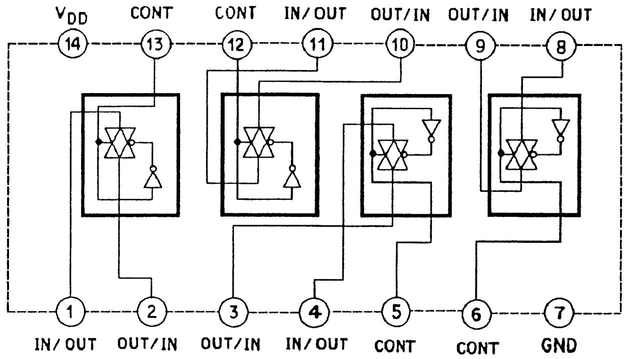
HA12088ANT : IC3001



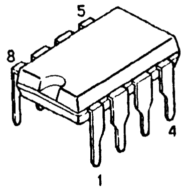

VCC 42
RECIN 41
BIAS 40
PBIN 39
R.P 38
IA OUT 37
N.R IN 36
PB⊖ IN 35
PB OUT 34
SS IN 33
SS OUT 32
HLS CCR 31
HLS HPF 30
HLS DEF1 29
HLS DEF2 28
AS 27
LLS CCR 26
LLS HPF 25
LLS DEF1 24
LLS DEF2 23
REC OUT 22
R.P SW
PB AMP
S.S
H LS
AS
LLS
POWER SUPPLY BIAS
B/C/OFF R/P CONTROL
R.P SW
R.P SW
R.P SW
PB AMP
S.S
H LS
AS
LLS
1 RECIN
2 GND
3 PBIN
4 REF
5 B.C OFF
6 IA OUT
7 N.R IN
8 PB⊖ IN
9 PB OUT
10 SS IN
11 SS OUT
12 HLS CCR
13 HLS HPF
14 HLS DEF1
15 HLS DEF2
16 AS
17 LLS CCR
18 LLS HPF
19 LLS DEF1
20 LLS DEF2
21 REC OUT

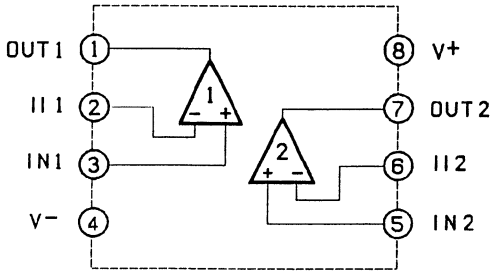
TC4066BP : IC4001, 4002



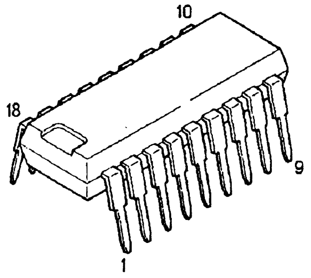

VDD ⑭
CONT ⑬
CONT ⑫
IN/OUT ⑪
OUT/IN ⑩
OUT/IN ⑨
IN/OUT ⑧
① IN/OUT
② OUT/IN
③ OUT/IN
④ IN/OUT
⑤ CONT
⑥ CONT
⑦ GND

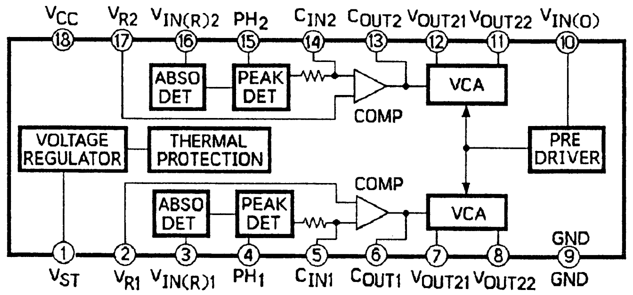
M5238P : IC5001



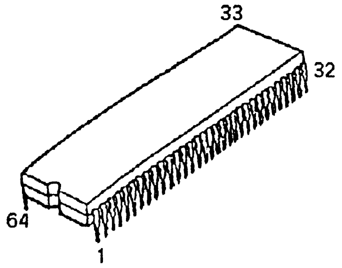

OUT1 ①
II1 ②
IN1 ③
V− ④
⑧ V+
⑦ OUT2
⑥ II2
⑤ IN2
1
2
−
+

µP1297CA : IC5051



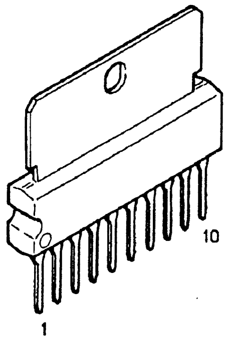

VCC ⑱
VR2 ⑰
VIN(R)2 ⑯
PH2 ⑮
CIN2 ⑭
COUT2 ⑬
VOUT21 ⑫
VOUT22 ⑪
VIN(O) ⑩
ABSO DET
PEAK DET
COMP
VCA
VOLTAGE REGULATOR
THERMAL PROTECTION
PRE DRIVER
COMP
ABSO DET
PEAK DET
VCA
GND
① VST
② VR1
③ VIN(R)1
④ PH1
⑤ CIN1
⑥ COUT1
⑦ VOUT21
⑧ VOUT22
⑨ GND

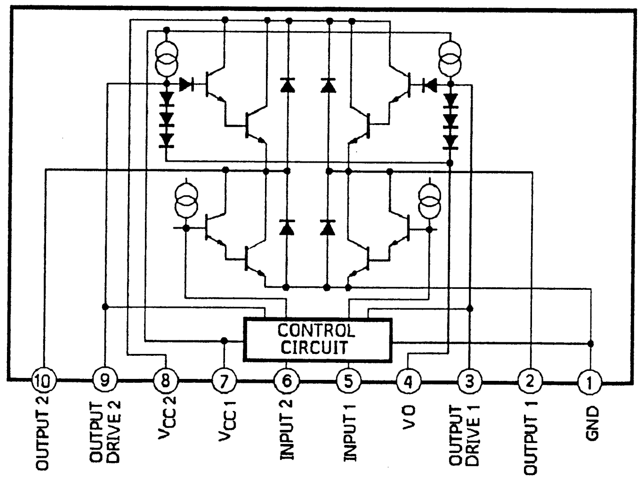
96291F01 : IC6001



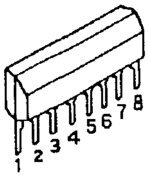
PIN NO.	CORD ADDRESS		PIN NO.	CORD ADDRESS		PIN NO.	CORD ADDRESS	
1	VAPEF		23	B-RM1	O	45	K00	I
2	VASS		24	B-RM2	O	46	K01	I
3	B-RPC	I/O	25	B-CPM	O	47	K02	I
4	B-MMS	I/O	26	B-SOL	O	48	K03	I
5	B-L.TA	I/O	27	REC BIAS	O	49	RESET	I
6	B-R.SE	I/O	28	REC MUTE	O	50	X-IN	I
7	A-RPC	I/O	29	PB	O	51	X-OUT	O
8	A-MMS	I/O	30	REC	O	52	HOLD	I/O
9	A-L.TA	I/O	31	TEST	I	53	R80	I/O
10	A-R.SE	I/O	32	$-V_{SS}$		54	R81	I/O
11	B-NOR	I/O	33	P20	O	55	S-I	I/O
12	B-CrO_2	I/O	34	P21	O	56	S-O	I/O
13	B-METAL	I/O	35	P22	O	57	R90	I/O
14	A-CrO_2	I/O	36	P23	O	58	R91	I/O
15	B-DUBx2	I/O	37	P30	O	59	R92	I/O
16	A-DUBx1	I/O	38	P31	O	60	A-RM1	I/O
17	DUB ON/OFF	I/O	39	P32	O	61	A-RM2	I/O
18	OUTPUT MUTE	O	40	P33	O	62	A-CPM	I/O
19	MUSIC SEARCH	I/O	41	PB0	I/O	63	A-SOL	I/O
20	POWER OFF	I/O	42	PB1	I/O	64	V_{DD}	I/O
21	DECK A/B	I/O	43	PB2	I/O			
22	POWER ON/OFF	I/O	44	PB3	I/O			

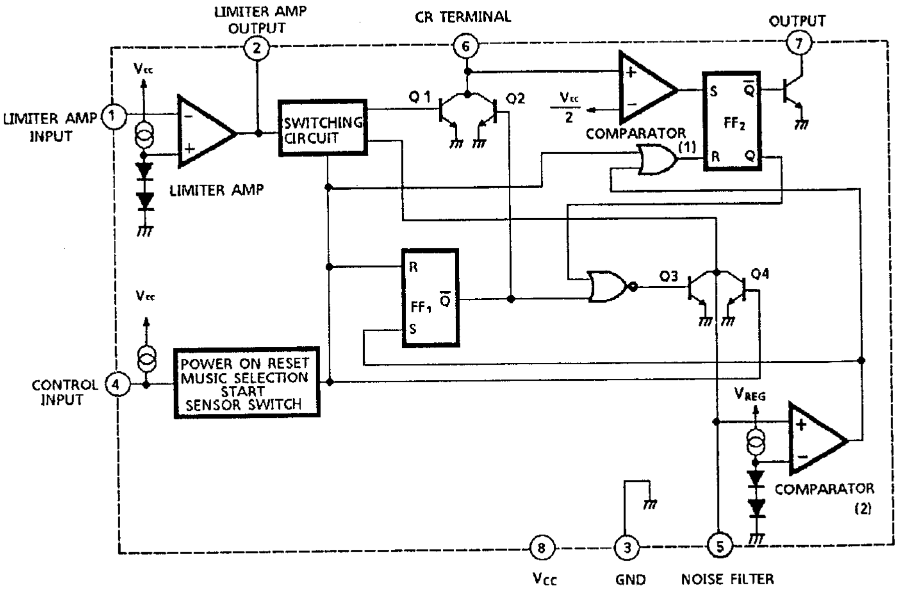
BA6229 : IC6071, 6072



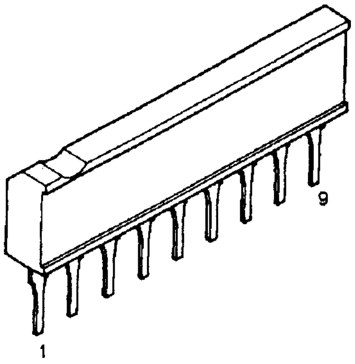

CONTROL CIRCUIT
⑩ OUTPUT 2
⑨ OUTPUT DRIVE 2
⑧ VCC2
⑦ VCC1
⑥ INPUT 2
⑤ INPUT 1
④ VO
③ OUTPUT DRIVE 1
② OUTPUT 1
① GND

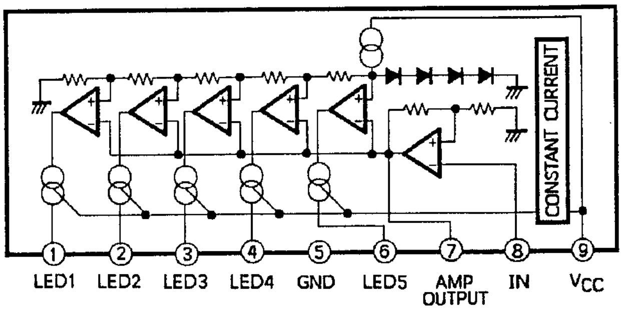
M51143AL : IC6101




LIMITER AMP OUTPUT
②
CR TERMINAL
⑥
OUTPUT
⑦
Vcc
LIMITER AMP INPUT
①
LIMITER AMP
SWITCHING CIRCUIT
Q1
Q2
Vcc/2
COMPARATOR (1)
S
Q̄
FF2
R
Q
R
FF1
Q̄
S
Q3
Q4
Vcc
CONTROL INPUT
④
POWER ON RESET MUSIC SELECTION START SENSOR SWITCH
VREG
COMPARATOR (2)
⑧
③
⑤
Vcc
GND
NOISE FILTER

BA6124 : IC8101, 8102




CONSTANT CURRENT
①
②
③
④
⑤
⑥
⑦
⑧
⑨
LED1
LED2
LED3
LED4
GND
LED5
AMP OUTPUT
IN
VCC